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April 1993

U.S. Department of Agriculture

Forest Service

Ochoco National Forest

North Fork Crooked River Management Plan



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As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interest of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. administration.

BLM/OR/WA/PL-93/17+1792



March 19, 1993

Dear River Enthusiast,

Thank you for your help, cooperation, and support during the river planning process for the North Fork of the Crooked River. Your concern and contribution to the planning process has helped produce a plan that will guide management along the river corridor for at least ten years. We feel this plan will improve all resource values along the river, especially water quality, streamside vegetation, and scenic values.

Enclosed are three documents. First is the Decision Record which explains the decisions made in the river plan for the Bureau of Land Management administered land. Second is a Decision Notice which explains the decisions affecting the Ochoco National Forest administered land. And finally, you will find the North Fork Crooked River Final River Management Plan. This plan contains guidelines for future river management by both agencies, project lists and monitoring guidelines, as well as several appendices.

If you have questions regarding the River Plan, Decision Record, or Decision Notice contact either Sue Kocis (447-9530) for Forest Service related questions or SuZan Meiners (447-8770) for Bureau of Land Management related questions.

HARRY R. COSGRIFFE
Central Oregon Resource Area Manager
Prineville District
Bureau of Land Management

THOMAS A. SCHMIDT
Forest Supervisor
Ochoco National Forest



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**Decision Record
and
Finding of No Significant Impact**

**North Fork Crooked
Wild and Scenic River Management Plan**

Prineville, Oregon

USDI, Bureau of Land Management, Prineville District

DECISION:

It is the decision of the Bureau of Land Management to adopt the Preferred Alternative (Alternative 4) and its associated management plan as described in the Draft North Fork Crooked River Management Plan and Environmental Assessment (NFCRMP/EA - August 1992). This decision incorporates by reference all management actions under the Preferred Alternative and Management Actions Common to All Alternatives (MACTA's). Some management actions were modified to reflect new information and public comments received during the public review period of the Draft NFCRMP/EA. This decision also incorporates, by reference, mitigating measures identified in the Draft NFCRMP/EA.

RATIONALE:

The Preferred Alternative and MACTA's were chosen as the best management alternative scenario because together they offer the widest range of beneficial uses of the environment without degradation and provide the greatest overall protection and enhancement of the river corridors outstandingly remarkable and significant resource values.

All management actions are in conformance with the Brothers/La Pine Resource Management Plan, and satisfy requirements of the Omnibus Oregon Wild and Scenic Rivers Act of 1988 and the National Environmental Policy Act.

MONITORING:

Monitoring of the river management plan has been addressed in the accompanying document. This monitoring plan is incorporated by reference into this decision.

FINDING OF NO SIGNIFICANT IMPACT:

The Bureau of Land Management (Prineville District) has analyzed various alternatives for managing the North Fork Crooked Wild and Scenic River corridor. The alternatives and associated analysis are described in the Draft NFCRMP/EA; which was made available for public review on September 21, 1992. This Draft document is available for review at the BLM, Prineville District Office and the Ochoco National Forest Supervisor's Office. The options for management direction identified in the Draft NFCRMP/EA, hereby incorporated by reference, will assure that no significant impacts will occur to the human environment.

Under the four alternatives analyzed, significant impacts on quality of the human environment will not occur based on, but not limited to, the following considerations:

Analysis indicated no significant impacts on society as a whole, the affected region, the affected interests, or the locality.

Public health or safety will not be significantly affected.

The federal lands within the legal river corridor boundary will remain in federal ownership under all alternatives. This will ensure protection of riparian resources (floodplain/wetland).

The alternatives are not part of any other action having the potential for cumulatively significant impacts to the important and relevant resource values in the planning area.

Cultural resources on, or eligible for, the National Register of Historic Places will not be adversely affected, nor would Native American religious sites.

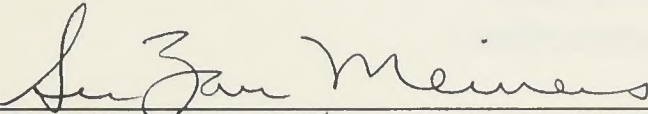
The alternatives will not significantly affect endangered or threatened species or their habitat determined to be critical under the Endangered Species Act of 1973.

The alternatives do not violate federal, state or local legal requirements for environmental protection, nor are there any known inconsistencies with officially approved or adopted federal, state, tribal, or local resource plans, policies or programs.

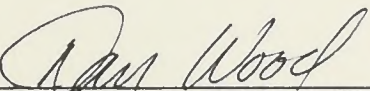
Adverse impacts identified are minimal. Continued resource monitoring will ensure that no significant adverse impacts occur. As needed, appropriate management actions will be instituted to protect outstandingly remarkable values (scenic, recreation, wildlife, botanic, and riparian), important natural and cultural resources, and impacts to threatened or endangered species habitat.

On the basis of the information contained in the Draft NFCRMP/EA and all other information available as summarized above, it is the determination of the Bureau of Land Management that none of the four alternatives constitute a major federal action significantly affecting the quality of the human environment. Therefore, an environmental impact statement is unnecessary and will not be prepared.

I recommend adoption of the North Fork Crooked Wild and Scenic River Management Plan/EA.


SuZan Meiners
Outdoor Recreation Planner
Bureau of Land Management

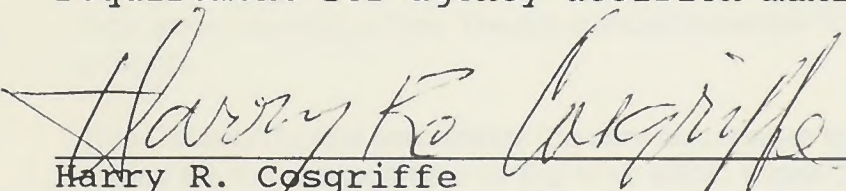
3/19/93
Date


Dan Wood
Supervisory Outdoor Recreation Planner
Bureau of Land Management

3/19/93
Date

Manager Approval:

I approve the North Fork Crooked Wild and Scenic River Management Plan/EA decisions as recommended. This document meets the requirement for agency decision making as provided in 40 CFR 1505.


Harry R. Cosgriffe
Central Oregon Resource Area Manager
Bureau of Land Management

3/19/93
Date

Appeals Process

Within 30 days of the receipt of this decision, you have the right to protest to the Prineville District Manager and thereafter appeal to the Board of Land Appeals, Office of the Secretary, in accordance with the regulations of 43 Code of Federal Regulations 4.400. The Protest to the District Manager must be filed in writing in the Prineville District Office of the Bureau of Land Management. If no protests or appeals are filed, this decision will become effective and be implemented in 30 days.

DECISION NOTICE and FINDING OF NO SIGNIFICANT IMPACT

North Fork Crooked River Wild and Scenic Rivers Environmental Assessment

Crook County, Oregon
USDA Forest Service, Ochoco National Forest
Prineville, Oregon

INTRODUCTION

In 1988, Congress designated 34.2 miles of the North Fork Crooked River as a wild and scenic river under the Oregon Omnibus Wild and Scenic Rivers Act. The river is located in central Oregon approximately 40 miles from Prineville, Oregon as shown on Map 2.

The Environmental Assessment (EA) for the North Fork Crooked River Management Plan documents the results of the analysis of alternatives for managing the designated segments of the river, including the effects of each alternative. The EA and Management Plan were a result of joint planning efforts between the Bureau of Land Management, Prineville District; the U.S. Forest Service, Ochoco National Forest; and many state and local agencies and publics. The EA is available at the Ochoco National Forest Supervisor's Office in Prineville, Oregon.

This Decision Notice establishes the river boundaries to be recommended to the U.S. Congress and adopts a plan for the management of the area within those boundaries. The management plan is designated to protect and enhance the river's outstandingly remarkable scenic, recreation, wildlife (bald eagles), and botanical (riparian habitat in Segment 5) values. It also protects and enhances significant botanical values (*Calachortus longebarbatus* var. *peckii*, and old growth ponderosa pine) and potentially significant fisheries values (wild rainbow/reddband trout).

The Plan describes the conditions which need to be achieved and/or maintained in order to protect the river's values, and prescribes standards and guidelines to govern activities within the boundaries that could affect the river's values. It also establishes a program for monitoring activities within the area to ensure that management direction is followed and the desired results are achieved.

This Decision Notice will amend the Ochoco National Forest Land and Resource Management Plan, 1989. Although the River Management Plan establishes standards and guidelines, monitoring elements, and potential projects, accomplishment will depend on budget allocations. If budget allocations are insufficient, activities proposed in the River Management Plan may need to be rescheduled. Insufficient budgets over a period of several years could cause an inability to implement proposed activities, to apply standards and guidelines, and to achieve the desired future conditions.

LOCATION OF THE WILD AND SCENIC RIVER

The North Fork is located in central Oregon, approximately 40 miles east of Prineville. The mouth of the North Fork is located about 20 miles west of Paulina, Oregon. River Segment 1 (located south of Big Summit Prairie), Segment 2 (located east of the Prairie), and Segment 6 (located near the river mouth), are classified as "recreation" components of the National Wild & Scenic River system. Segments 3 and 4, located below Deep Creek, are classified as "scenic" components. Segment 5, located in the North Fork Wilderness Study Area is classified as "wild".

The North Fork is a mixture of land ownerships including BLM, Forest Service, and private. River Segments 1 through 4 contain a total of 17.6 river miles with 5,618 acres owned as follows: 610 acres private; 120 acres BLM; and 4,888 acres Forest Service. Segments 5 and 6 contain no Forest Service lands.

DECISION

Based on analysis documented in the Environmental Assessment, Draft River Management Plan, and public comment received during the 60 day review period, which ended November 23, 1992, it is my decision to adopt Alternative 4 with modifications as the selected alternative. Modifications to Alternative 4 include deleting the 20 percent shrub utilization standard and replacing it with guidelines for an 85 percent unimpeded riparian recovery rate; changing the location of the proposed trail in Segment 3 to a shorter trail near Deep Creek Campground in Segments 2 and 3; changing the standard for a 0 percent increase in stream turbidity to meeting State Department of Environmental Quality standards; and more clearly defining the desired future conditions for each resource value.

This alternative delineates a final river boundary (to be recommended to the U.S. Congress), identifies desired future resource conditions, management standards and guidelines for various resources, and provides detailed implementation and monitoring plans for achieving river objectives. It is my decision to amend specific parts of the Ochoco National Forest Land and Resource Management Plan of 1989, in order to implement Alternative 4 modified.

Description of Alternative 4 Modified

The overall goal of the selected alternative 4 modified is:

The North Fork Crooked River will be protected as a free-flowing river with a diverse, dynamic, sustainable ecosystem, ranging from wet prairies to basalt canyons. All future river management or activities occurring within its boundaries will maintain and enhance the outstandingly remarkable and significant river values for which the river was designated including scenic, wildlife, botanical, fish, and recreation values.

The plan addresses issues related to instream resources and riparian habitat; recreation opportunities and public access; upland vegetation management; fish and wildlife habitat; cultural and historic resources; river boundaries; and public/private landowner cooperation. Seven resource management objectives guided development of the plan and are explained on page 9 of the River Plan.

Management direction emphasizes protection and enhancement of scenic values through riparian improvement and upland vegetation management. Fisheries and water quality will be improved. Commodity outputs such as timber and grazing will be reduced (less than 1 percent of Forest outputs). A broad range of recreation settings from Roaded Natural to Primitive are provided to meet projected demand. River values will be protected and enhanced by specifying scenic, recreation, and water quality objectives.

Instream resources and riparian habitat

Protection and enhancement of riparian areas and water quality is emphasized. An instream flow study will be conducted by federal agencies to determine flows necessary to maintain or enhance river values. Water quality will meet State DEQ standards. This will be accomplished through improvement of riparian vegetation. Eighty-five percent of unimpeded (unhindered) recovery rate within riparian zones will be achieved. One hundred percent of potential streamside shade will be attained. Potential will be tied to seral stages recognizing that 100 percent shade over an entire stream at any one point in time is not sustainable over the long term. Instream structures and planting of riparian vegetation will occur. Water sources will be developed outside the riparian zone to disperse livestock. A water quality monitoring plan will be developed and implemented.

Unimpeded recovery will be measured by building exclosures within the riparian areas for comparison studies. Until exclosure study information is available, information on unimpeded recovery rates from similar rivers will be used.

All long term changes in livestock management will be dealt with at the project specific level through updates to the Allotment Management Plans (AMPs). Four out the the five allotments within the river corridor are working towards improved range and riparian condition. The Big Summit Allotment has already been revised to incorporate Wild & Scenic river objectives. The Roba Allotment is currently in revision and will be completed within one year. Completion of the remaining three AMPs (Fox Canyon, Antler, and Gray Prairie) will depend upon funding, national and regional priority, available resources, and results of monitoring data. Until the AMPs are revised the Annual Operating Permits for these allotments will incorporate river and forest plan objectives and begin achieving desired future condition.

I expect to achieve desired future condition of streamside vegetation within 10-15 years, and desired future condition in stream channel structure and form within 15-50 years. My commitment to improved water quality and riparian habitat will be demonstrated through measurable improvement in these areas through cooperative monitoring programs.

Recreation

River Segments 1 and 2 will be managed for Roaded Natural recreation opportunities. Segments 3 and 4 will be managed for Semiprimitive Nonmotorized recreation opportunities except for specific, identified areas of Semiprimitive Motorized access.

A low standard trail in keeping with the ROS and visual quality objective of Retention will be developed near Deep Creek campground. Deep Creek campground will be reconstructed to provide for public health and safety, barrier-free access for the physically challenged, water and sanitation. At least one scenic viewpoint will be constructed in Segment 2.

Access

Motorized access in all segments will meet ROS objectives. Road management objectives will conform to the existing Forest LRMP. Forest Service Road 4260-230 in Segment 3 will remain open to the dispersed campsite on the river. In Segments 1 and 2, Forest Roads 4225-010, 4225-051, 4225-072, and 4225-141 will be closed on a temporary basis. In Segment 3, Forest Roads 4260-341, 4260-342, 4240-157, 4240-159, and 4240-156 will be closed permanently where they go below the canyon rim.

Vegetation

Scenic resources throughout the river corridor will be protected and enhanced. Foreground views in all river segments will meet the Visual Quality Objectives (VQOs) for Retention. Middleground views will meet Partial Retention VQOs. Retention is a long term objective and may not be met during short periods of time (up to 5 years) in order to achieve long-term desired future conditions. Project that may not meet short-term Retention objectives may include streambank rip-rap, rock check dams, and vegetation plantings.

A Vegetation Management Plan will be developed for the river corridor. Prescribed fire, precommercial thinning, and planting native species will be some of the tools considered to achieve desired future condition.

No scheduled timber harvest will be planned in foreground views. Timber harvest such as thinning, deemed necessary to implement the vegetation management plan may occur if the objective is to maintain or enhance scenic, recreation or water quality values over the long term. Salvage harvest may be allowed only under catastrophic conditions such as a major forest fire.

Williams Prairie, in Segment 1 will be managed as a sustainable meadow ecosystem, including the reintroduction of fire.

Fish and wildlife habitat

Wild rainbow/redband trout will be managed for natural production consistent with the Oregon Department of Fish & Wildlife Management Plan for the river.

Wildlife management will conform to existing Forest LRMP standards (pp. 4-242 through 4-264) and State and Federal laws. Two special wildlife allocation exist in Segments 2 and 3, Old Growth and Winter Range. Management of these areas will continue to conform to existing LRMP standards and guidelines for MA-F6 Old Growth and MA-F20 Winter Range.

Cultural and historic resources

Cultural and historic resources will continue to be managed under existing Forest LRMP Standards and Guidelines (pp. 4-121-126), and state and federal laws. Traditional Native American uses and access to ceded lands will continue.

River boundaries

The final Wild & Scenic river management boundaries described in Appendix G of the North Fork Crooked River Management Plan will be recommended to Congress. This boundary changes the total acres of Forest Service managed lands within the North Fork allocations from 2,660 acres to 4,937 acres. This averages to 317 acres per river mile.

Public/private landowner cooperation

County zoning, the State Forest Practices Act, and other applicable state and federal laws will be the primary means of protecting river values on private lands. Cooperative projects between private landowners, public groups, private citizens, and agencies will be accomplished by sharing federal land management agency goals, as well as pursuing partnership and challenge cost share programs to improve water quality and protecting scenic river values.

REASONS FOR THE DECISION

It is my decision to implement alternative 4 modified because it provides the best mix of management options to protect and enhance the outstandingly remarkable and significant river values of the North Fork. This alternative best protects scenic and recreation river values through improvement of riparian habitat, fish and wildlife habitat, and water quality while cooperating with existing landowners and permittees.

Instream Resources and Riparian Habitat

Monitoring will play a key role in ensuring successful plan implementation. All action described under instream resources and riparian habitat, as well as the road management objectives are aimed at reducing water temperatures, enhancing streambank stability, and enhancing the vegetation along the river. By involving concerned citizens and groups in our monitoring and rehabilitation efforts, I hope to ensure continued public support and trust in our efforts.

Revising annual operating permits to include Wild and Scenic River guidelines instead of waiting for revision of the Allotment Management Plans will insure faster riparian area improvement where needed. My decision to not adopt the 20 percent utilization standard for shrubs, as proposed in Alternative 4, was based on public concern. This utilization standard did not necessarily assure recovery of the riparian zone. Instead, I have decided to use a more clearly defined desired future condition and 85 percent of unimpeded (unhindered) recovery rate. These standards better describe management direction and can be easily measured.

Recreation Opportunities

The recreation opportunities and facilities proposed in the selected alternative were chosen because they best meet river classifications and projected future recreation demand for the next ten years. The low standard trail will be developed near Deep Creek campground to provide additional recreation opportunities in that area, while confining human influence in the riparian zone to specific locations. The trail can be designed to minimize riparian area disturbances and will reduce the amount of user made trails in the area. Final location will be determined during project specific analysis.

Access

Roads that are planned for temporary or permanent closure throughout the river corridor will be closed to reduce disturbance to riparian areas and implement the recreation objectives for Semiprimitive Nonmotorized recreation.

Vegetation

A Vegetation Management Plan will be developed in order to retain outstandingly remarkable scenic values along the river corridor over the long term. The visual quality objective of Retention for all foreground views will also protect scenic river values.

Fish and Wildlife Habitat

Wild rainbow/redband trout may have the potential to be a significant river value once habitat is restored. Most riparian and water quality objectives in this plan are aimed at restoring the habitat. By coordinating with Oregon Department of Fish and Wildlife I hope to achieve a healthy population of this sensitive trout species.

The current wildlife standards and guidelines in the Ochoco National Forest LRMP were found to be adequate for protecting and enhancing the existing and potential species within the corridor.

Cultural and Historic Resources

The existing Ochoco National Forest LRMP guidelines for cultural and historic resources were found to be sufficient to protect these resources.

River boundaries

The final river boundary as shown on Map 2 was selected because it best captures foreground scenic views, an outstandingly remarkable value. In addition, the boundary will be easily locatable and identifiable on the ground, with the least cost.

Public/Private landowner cooperation

Coordination with federal, state, tribal, and county agencies as well as private landowners will occur to minimize effects on landowners and land use practices. Cooperation between the Bureau of Land Management and Ochoco National Forest will continue under a Memorandum of Understanding, and by pursuing specific actions such as joint instream flow studies, recreation use surveys, and fish enhancement projects.

ALTERNATIVES CONSIDERED

Three other alternatives were considered in the Environmental Assessment. Alternative 1, the No Action Alternative would have implemented current agency management guidelines.

Alternative 2 emphasized dispersed and developed recreation opportunities, motorized access and interpretive services. Riparian areas, fisheries, and water quality would be improved while retaining commodity uses such as livestock and timber harvest.

Alternative 3 emphasized accelerated improvement of water quality and riparian areas, using natural processes, while allowing undeveloped recreation opportunities. Commodity uses such as timber and grazing are allowed only if they assist in protection or enhancement of the outstandingly remarkable river values.

Alternative 4 emphasized protection and enhancement of scenic values through accelerated riparian improvement and upland vegetation management. Fisheries and water quality would be improved while slightly reducing or redistributing livestock grazing and timber harvest. A broad range of recreation opportunities from Roaded Natural to Semiprimitive Nonmotorized would be provided. This alternative is the same as the selected alternative except for changes to riparian vegetation standards, the location of the low standard trail, water turbidity standards, and more specific goals and desired future condition statements.

RELATIONSHIP TO OCHOCO NATIONAL FOREST LAND AND RESOURCE MANAGEMENT PLAN

The North Fork Crooked River Environmental Assessment (EA) documents the results of the analysis of management options for the river and designated corridor. This decision will amend the Ochoco National Forest Land and Resource Management Plan.

The EA and Management Plan are available for review at the Ochoco National Forest Supervisors Office, Big Summit Ranger District, Paulina Ranger District, and the Prineville Public Library.

AMENDMENTS TO THE OCHOCO NATIONAL FOREST LAND AND RESOURCE MANAGEMENT PLAN, CHAPTER 4

In addition to implementing Alternative 4 modified, this decision also constitutes an Amendment to the Ochoco National Forest Land and Resource Management Plan (LRMP). The purpose of the Amendments to the LRMP are to:

- 1) change the allocation of approximately 1,024 acres of General Forest land (MA-F22) to North Fork Crooked River Recreation Corridor (MA-F23).
- 2) change the allocation of approximately 230 acres of General Forest land (MA-F22) to North Fork Crooked River Scenic Corridor (MA-F24).
- 3) specifies that the Standards and Guidelines for Old Growth (MA-F6), Winter Range (MA-F20), and Deep Creek Recreation Area (MA-F19) be incorporated in the North Fork Crooked River Recreation Corridor in the areas shown on the map. In those areas where Wild & Scenic River standards and guidelines and those in the management areas for Old Growth, Winter Range, or Deep Creek Recreation Area conflict, the stricter standards and guidelines that best protect river values will apply.

- 4) incorporates new standards and guidelines for the Wild and Scenic River.

PUBLIC INVOLVEMENT

A public involvement plan was formulated in March 1991, to insure that concerns of local residents, landowners, recreation users, Crook County, the State of Oregon, the Confederated Tribes of the Warm Springs, and other federal agencies were heard and considered. The public involvement program consisted of seven public meetings, mailings of two river newsletters to several hundred people, mailing of the draft river plan, and informal meetings with any party requesting them.

An Environmental Assessment and draft River Management Plan were sent to interested publics August 23, 1992 with a 60 day comment period. Twenty-seven letters were received and three people attended the public meeting held in Prineville, Oregon during the comment period. People were concerned about streamside vegetation, grazing standards, restoration of water quality and fish populations, state navigability claims, recreation improvements and treatment of private lands within the river boundaries. As a result of these comments, the Interdisciplinary Team, Forest Service District Rangers, Forest Supervisor, BLM Area Managers and the Prineville BLM District Manager modified the preferred alternative. Modifications were made to grazing standards, and the desired future condition of riparian areas was more clearly defined.

FINDING OF NO SIGNIFICANT IMPACT AND COMPLIANCE WITH LAWS

Following a review of the environmental assessment, I have determined that there is no significant impact on the quality of the human environment. For this reason, an environmental impact statement will not be prepared. This determination is based on the following considerations:

1. Irreversible and irretrievable commitments of resources and adverse cumulative or secondary effects will not exceed those discussed and evaluated in the Final Environmental Impact Statement for the Ochoco National Forest.
2. Direct, indirect, and cumulative environmental impacts were analyzed and discussed in the Environmental Assessment and were not found to be significant. Special values found within the river corridor, including scenery, recreation, historic resources, wildlife (Bald Eagles), and botany (Mariposa lily) receive specific protection and/ or enhancement in the selected alternative.
3. There will be no significant impacts to wetlands, floodplains, prime farm lands, range lands, minority groups, women, or consumers. The overall aim of the management plan is to improve water quality, protect wetlands, improve rangelands, make recreation facilities more accessible to people, and cooperate with the landowners of existing farm and range lands within the river corridor.
4. Activities planned in the Wild and Scenic River corridor will not adversely affect the environment beyond or down river from the designated corridor. Long-term affects will include improved water quality.
5. River Management Plan direction is not expected to cause any significant adverse impacts to any threatened, endangered, or sensitive plant or animal species. Several State Sensitive plants are known to occur within the river corridor, are considered a significant river value, and will be protected as one of the management actions. In addition, site-specific biological evaluations will be done for projects planned in the corridor.
6. The River Management Plan is in compliance with the amended Ochoco National Forest Land and Resource Management Plan and relevant Federal, State, and local laws, regulations, and requirements

designed for the protection of the environment. The River Management Plan meets the State of Oregon water and air quality standards.

A biological evaluation for plants, animals, and fish has been completed and is included in the analysis file of the EA at the Ochoco National Forest Supervisor's Office. The biological evaluation assesses the impacts of the River Management Plan on all threatened, endangered, and sensitive (T,E,&S) species that could potentially be found in the river corridor. Activities proposed in the River Management Plan are not expected to cause any adverse affects to T,E,&S species.

A cultural resource evaluation of the river corridor has been completed. There are several historic sites located on private lands, but no historic sites on Forest Service managed lands. All ground disturbing activities proposed in the River Management Plan will require additional NEPA analysis and formal consultation with the State Historic Preservation Office at the project level. Site specific cultural resource information is exempt from the Freedom of Information Act.

IMPLEMENTATION

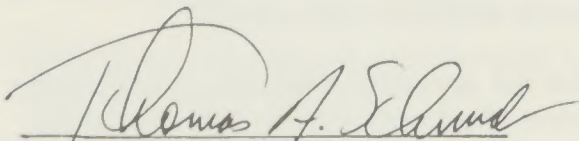
Implementation of this decision may begin 7 calender days after the Decision Notice appears in the Bend Bulletin.

Each project identified in the Management Plan will require additional environmental analysis prior to implementation with the appropriate level of analysis in compliance with the National Environmental Policy Act and Forest Service requirements.

RIGHTS TO APPEAL

This decision is subject to appeal pursuant to 36 CFR 217. Any written Notice of Appeal of this decision must be fully consistent with 36 CFR 217.9 (Content of a Notice of Appeal) and must include the specific reasons for the appeal. A written Notice of Appeal, in duplicate, must be filed with the Reviewing Office, John Lowe, Regional Forester, P.O. Box 3623, Portland, OR, 97208-3623, within 45 days of the date legal notice of this decision appears in *The Bend Bulletin*. For further information contact Sue Kocis, Ochoco National Forest, Wild & Scenic River Planner (503) 447-9530.

Responsible Official:



THOMAS A. SCHMIDT
Forest Supervisor
Ochoco National Forest
P.O. Box 490
Prineville, OR 97754
(503) 447-6247

3-18-93

Date

NORTH FORK CROOKED RIVER TABLE OF CONTENTS

	<i>PAGE</i>
CHAPTER I - INTRODUCTION	
Plan Organization	NFCR- 1
Method of Plan Preparation.....	NFCR- 1
Federal Designation	NFCR- 2
 HISTORICAL PERSPECTIVE	 NFCR- 2
 RELATED FEDERAL, STATE, AND LOCAL PLANNING AND MANAGEMENT RESPONSIBILITIES	
Bureau of Land Management.....	NFCR- 3
U.S. Forest Service, Ochoco National Forest	NFCR- 3
U.S. Fish and Wildlife Service.....	NFCR- 3
Confederated Tribes of the Warm Springs Reservation of Oregon	NFCR- 4
Oregon State Parks and Recreation	NFCR- 4
Oregon Department of Fish and Wildlife.....	NFCR- 4
Oregon Water Resources Department.....	NFCR- 4
Division of State Lands	NFCR- 4
Department of Land Conservation and Development	NFCR- 4
Department of Forestry	NFCR- 5
Department of Environmental Quality	NFCR- 5
Oregon State Police	NFCR- 5
Crook County	NFCR- 5
 PUBLIC INVOLVEMENT	 NFCR- 5
Key Issues	NFCR- 6
Relationship to Existing Land Management Plans	NFCR- 6
 RELATIONSHIP TO PRIVATE LAND MANAGEMENT	 NFCR- 6
 CHAPTER II - MANAGEMENT DIRECTION	
OUTSTANDINGLY REMARKABLE AND SIGNIFICANT RIVER VALUES.....	NFCR- 7
 DESIRED FUTURE CONDITION OF THE RIVER CORRIDOR	 NFCR- 8
Riparian.....	NFCR- 8
Fisheries/Stream Ecology	NFCR- 8
Water Quality	NFCR- 8
Recreation	NFCR- 8
Scenery	NFCR- 8
Wildlife	NFCR- 8
Vegetation	NFCR- 8
Cultural Resources	NFCR- 8
Public/Private Cooperation	NFCR- 9
 MANAGEMENT GOALS AND OBJECTIVES	 NFCR- 9

SUMMARY OF MANAGEMENT DIRECTION	NFCR-11
Instream Resources and Riparian Habitat	NFCR-11
Recreation	NFCR-12
Upland Vegetation	NFCR-12
Wildlife	NFCR-12
Private Lands.....	NFCR-12
Boundaries	NFCR-13
MANAGEMENT AREA STANDARDS AND GUIDELINES	NFCR-14
Instream Resources and Riparian Habitat	NFCR-15
Recreation	NFCR-16
Access	NFCR-17
Facilities	NFCR-18
Scenic Resources	NFCR-19
Fire	NFCR-19
Timber	NFCR-19
Botany	NFCR-20
Fish and Wildlife Habitat	NFCR-20
Cultural Resources	NFCR-21
Private Lands.....	NFCR-21
Boundaries	NFCR-21
CHAPTER III - IMPLEMENTATION AND MONITORING	
IMPLEMENTATION	NFCR-22
Implementation Schedule	NFCR-22
MONITORING	NFCR-24
Monitoring Plan	NFCR-25
LIST OF REFERENCES	NFCR-28
TABLES	
Table 1. Land ownership within final North Fork Crooked River boundaries	NFCR-14
Table 2. Monitoring Plan for the North Fork Crooked River	NFCR-25
APPENDIX A - GLOSSARY	A- 1
APPENDIX B - MEMORANDUM OF UNDERSTANDING	A-15
APPENDIX C - LIST OF PREPARERS	A-18
APPENDIX D - RESPONSE TO PUBLIC COMMENTS	A-21
APPENDIX E - RIPARIAN AND RANGE CONDITION SUMMARY (FOREST SERVICE)	A-34
APPENDIX F - RIPARIAN SUMMARY (BLM)	A-36
APPENDIX G - BOUNDARY DESCRIPTION	A-38
APPENDIX H - LETTER TO THE CROOK COUNTY PLANNING DEPARTMENT	A-47
APPENDIX I - LETTER FROM THE CROOK COUNTY PLANNING DEPARTMENT	A-49

I

Introduction



"The rivers are our brothers
-- they quench our thirst."
≈ Chief Seattle ≈

NORTH FORK CROOKED RIVER MANAGEMENT PLAN

CHAPTER I

INTRODUCTION

The North Fork Crooked River (North Fork) was added to the National Wild and Scenic Rivers System as part of the Oregon Omnibus Wild and Scenic Rivers Act of 1988. This river management plan establishes a comprehensive approach to managing the free-flowing natural character of the North Fork. This plan is a result of a coordinated effort with the USDA Forest Service and USDI Bureau of Land Management (BLM), as well as other federal, state and local agencies and concerned publics to identify a plan for protection and enhancement of river-related values. The plan establishes boundaries and details specific management direction and resource monitoring for each segment of the river. It encompasses 34.2 miles of the North Fork from the headwaters near Serra Springs to 1.3 miles above the confluence with the main stem of the Crooked River (excluding 8 miles of private land in Big Summit Prairie).

Plan Organization

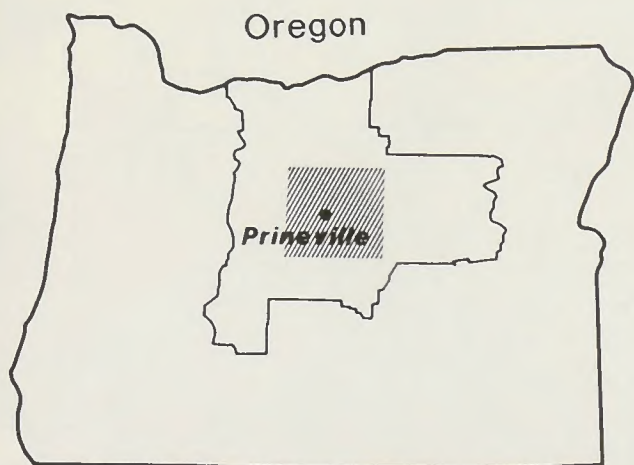
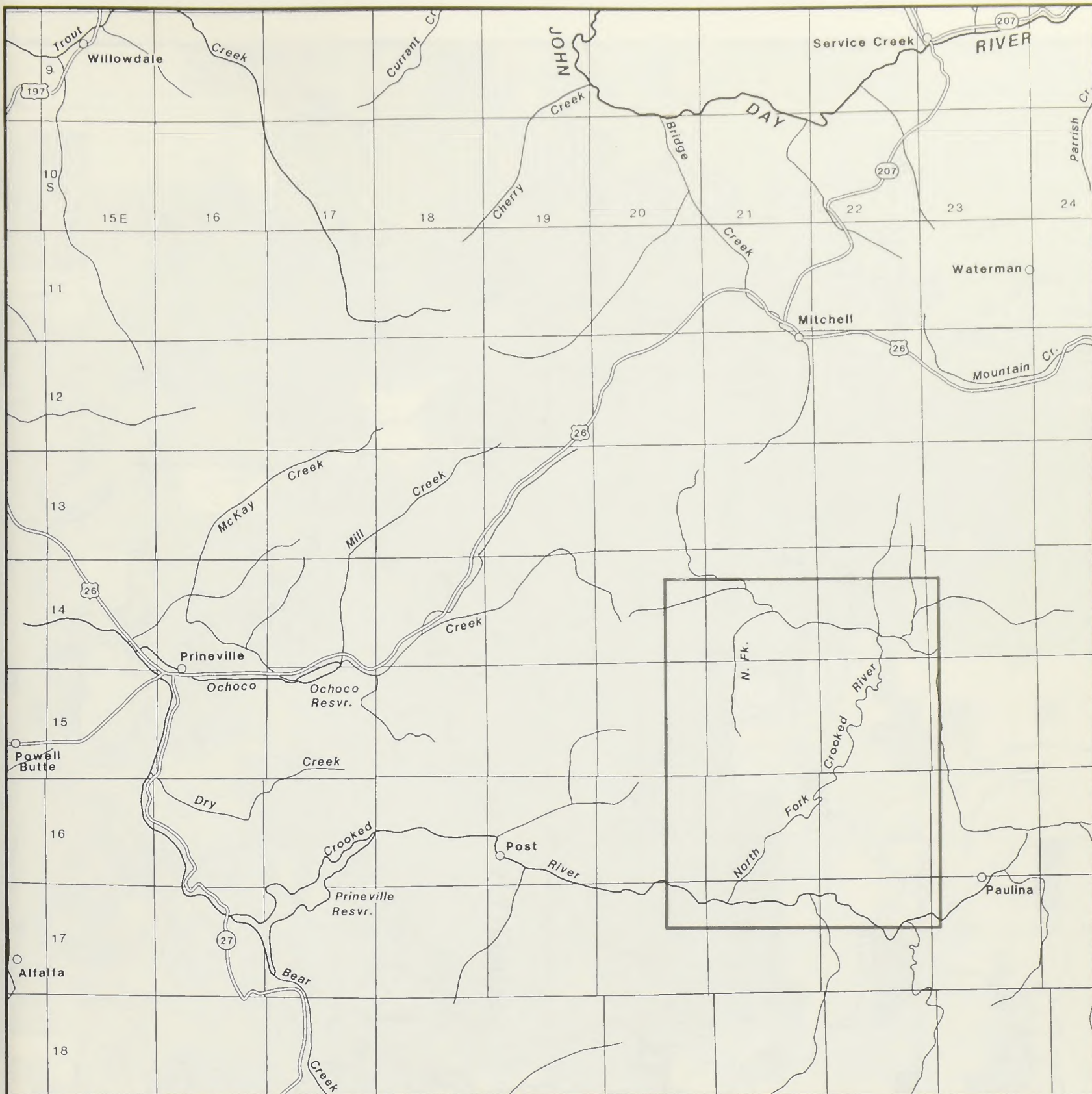
This river plan is organized into three chapters. Chapter I, **Introduction**, explains the wild and scenic river program, the roles of various federal, state, and local agencies in plan implementation, and provides an historical perspective on the river. Chapter II, **Management Direction for Federal Lands**, describes the outstandingly remarkable values found along the river, the desired future condition of the river resources, the management objectives for the river plan, and gives detailed management direction for the river. The boundary process is also described in Chapter II. Chapter III, **Implementation and Monitoring**, lists projects to be implemented and explains the type of monitoring that will be used to determine how well plan objectives are being met and how well river values are being protected and/or enhanced. This chapter also provides a list of projects that will occur in the river corridor. Appendices include a glossary, Memorandum of Understanding between the Bureau of Land Management and the Forest Service, list of preparers, response to public comments, summary of range and riparian condition, and legal boundary description.

Method of Plan Preparation

A Memorandum of Understanding between the Forest Service and BLM gave the BLM lead planning responsibility to develop the North Fork Crooked River Management Plan (Appendix B). An Interdisciplinary Team was composed of Forest Service and BLM professional staff members (see Appendix C). Final approval of the plan was shared by the Central Oregon Resources Area Manager, BLM and the Forest Supervisor, Ochoco National Forest.

The planning process included public involvement during review of the Resource Assessment findings, identification of issues and concerns, review of draft alternatives, and review of the draft River Management Plan. Involved publics included the Confederated Tribes of the Warm Springs Reservation of Oregon, Oregon Department of Fish and Wildlife, Crook County Planning Department, landowners, and various other federal, state and local agencies.

The public comments were incorporated into the final decision. Refer to Appendix D for agency response to these comments.

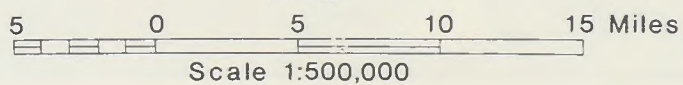


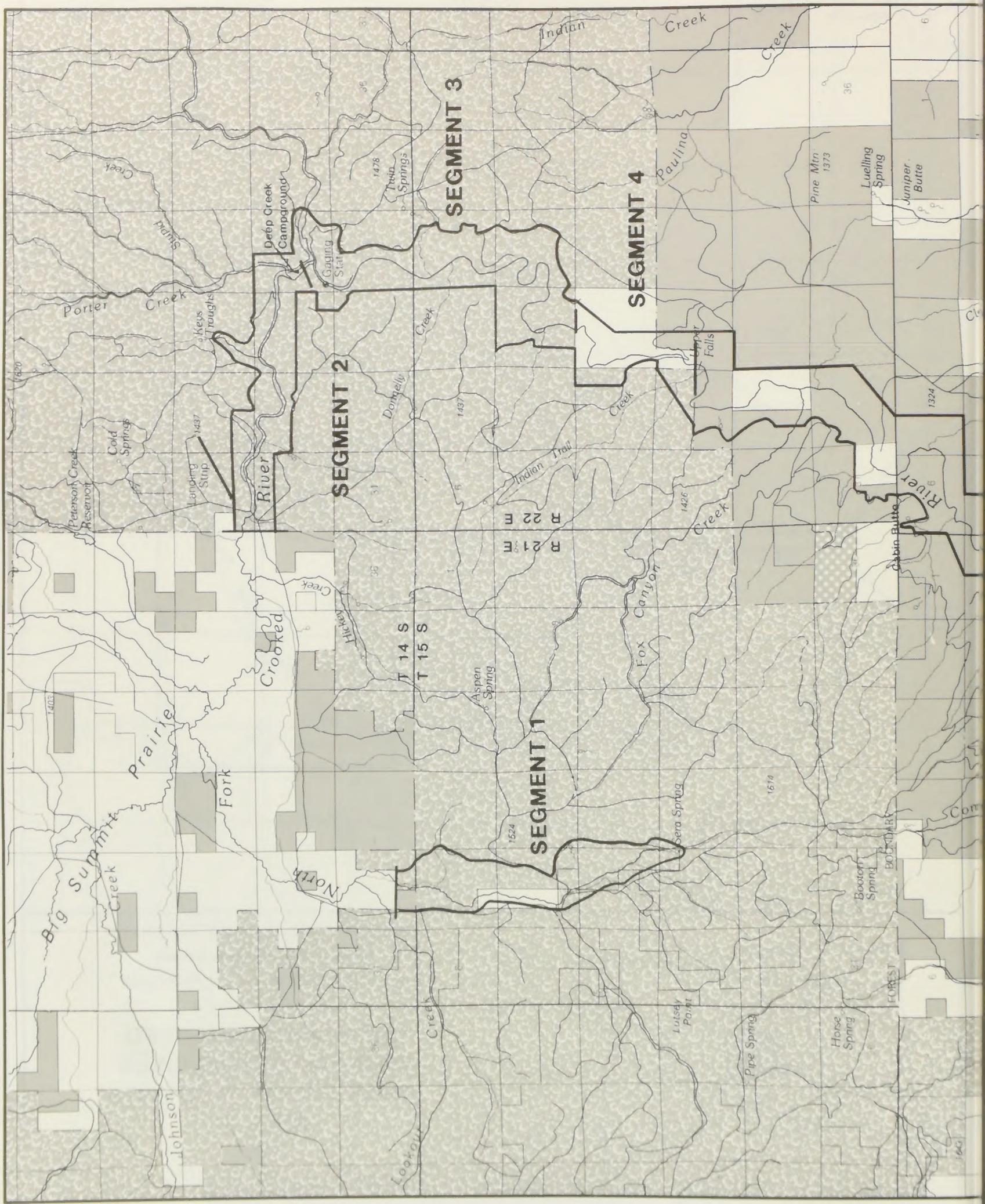
U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
U.S. DEPARTMENT OF AGRICULTURE
U.S. Forest Service

NORTH FORK CROOKED WILD AND SCENIC RIVER INDEX TO MAP SEGMENTS

MAP 1

1993





Federal Designation

The Wild and Scenic Rivers Act was passed in 1968 to balance river development with river protection. To accomplish this goal, Congress created the National Wild and Scenic Rivers System:

It is hereby declared to be the policy of the United States that certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, shall be preserved in free-flowing condition, and...shall be protected for the benefit and enjoyment of present and future generations.

The Oregon Omnibus Wild and Scenic Rivers Act of 1988 designated 40 river segments in Oregon, including portions of the North Fork, for inclusion in the Wild and Scenic Rivers system and directed the USDA Forest Service (Forest Service) and the USDI Bureau of Land Management (BLM) to develop management plans for each designated river.

A river is eligible for the National Wild and Scenic Rivers System if it is undammed and has at least one outstandingly remarkable value (ORV). Rivers may be added to the system either by an act of Congress or by order of the Secretary of Interior upon official request by a State. The main objectives of the Act are to keep selected rivers in a free-flowing condition and protect or enhance the important natural and cultural values of the river or river segment. The Act also recognized the need to provide for partnerships among landowners; federal agencies; and local, state and tribal governments in determining the future of these rivers.

HISTORICAL PERSPECTIVE

The diversity of environmental settings between the Ochoco Mountains, Big Summit Prairie and the Crooked River Valley played a major economic role in the lives of prehistoric and historic people. Each environment offered diverse economic opportunities, however, the North Fork canyon itself suggests a marginal environment with restricted resources and limited habitation sites. Archeological evidence indicates that aboriginal people used this area for at least the last 7,000 years. On the flanks of the Ochoco Mountain

there is evidence of temporary camps associated with the hunting of large and small game, root and bulb gathering, and use of lithic raw materials for tool manufacturing. Numerous large sites, some with pit house depressions are found around the margins of Big Summit Prairie. Recent inventories along the Crooked River valley (down river from the North Fork canyon) have revealed the presence of large sites most likely used for winter camps. However, the North Fork canyon itself was not a prime environmental setting for prehistoric use or occupation, except for very temporary purposes.

During the 1860's, Chief Paulina and his band supposedly maintained a hideout in Rabbit Valley. It is likely that the North Fork canyon may have been used by this band for escape or hiding. Likewise, early surveys noted a major "indian" trail crossing the river near Upper Falls, but this has not been substantiated.

The earliest white men to visit this general area were Hudson Bay Company fur trappers. Led by Peter Skene Ogden, a group of about 50 men trapped for fur on the Ochoco and Crooked Rivers in 1825. Traveling with Lt. John Fremont's expedition, Kit Carson may have visited the area in December, 1843. Several military expeditions passed through the area in the mid-1800's. The Willamette Valley to Canyon City Military road crossed the canyon at what is now called Teater's Ranch.

Crook County was established in October, 1882. Prineville (population 5,400), is the Crook County seat and the county's only incorporated city. Paulina, located 50 miles east of Prineville, was founded in 1870. The mouth of the North Fork is about 18 miles from Paulina. About 48 percent of Crook County is privately owned and 52 percent is publicly owned. The 1991 County population was 14,100.

For the first 50 years of Crook County history, raising livestock was the principle industry. Sheep and cattle have grazed portions or all of the canyon. Along the North Fork in Segments 2 and 5 there are historic cabins dating to the early 1900's. In the late 1890's logging and wood products became the leading industry in the area. Located along the North Fork in Segment 4 are the remains of a lumber mill built by Stillwell and Vanderburg from Bend, in the late 1940s or early 1950s. Currently, there are three lumber mills and three moulding

plants operating in Prineville. Cattle, sheep and agriculture are still viable industries. Mint, potatoes, wheat and alfalfa are the major crops grown.

The Confederated Tribes of the Warm Springs Reservation of Oregon retain reserved treaty rights to areas in the North Fork corridor (Treaty 1855). These rights include hunting, fishing, and gathering in usual and accustomed places and grazing livestock on unclaimed lands.

Recreation plays a major role in the quality of life in Crook County. There are several State and Federal developed campgrounds and parks. The primary recreation attractions for local residents are dispersed camping, hunting, fishing, and driving for pleasure. The North Fork contributes to these values by offering a developed campground, roads, semiprimitive motorized and nonmotorized recreation opportunities, and spectacular scenery. Several places on the North Fork are local "secrets" with special meaning to long term residents. The major population centers of Redmond, Bend, and Madras are within a 2-hour drive of the North Fork. Total population within a 2-hour drive is about 103,400 people (1990).

RELATED FEDERAL, STATE, AND LOCAL PLANNING AND MANAGEMENT RESPONSIBILITIES

The Prineville District, BLM and Ochoco National Forest coordinated with a number of Federal, State, and local agencies in development of this plan. These various agencies each have specific responsibilities related to the North Fork Crooked River as described below:

Bureau of Land Management (BLM)

In 1989, the BLM completed the Brothers/LaPine Resource Management Plan (RMP), which was a comprehensive land use plan that included BLM lands and minerals in Crook County. The total BLM surface acreage at the time of RMP completion was over 1,111,100 acres, including all BLM lands within the North Fork Crooked River planning area. BLM manages approximately 37 percent of the lands within the river corridor. The RMP included an Environmental Impact Statement which documented the environmental consequences of the plan. The plan established land use goals and objectives for Bureau administered lands, minerals, soils, watersheds, rangelands, forests, woodlands, fisheries, wildlife habitat, recreation and cultural

resources. It incorporated management direction for roads and access, utility and transportation corridors, fire control, noxious weed control, and continued interim management of wilderness study areas (WSA). Management direction for the North Fork Area of Critical Concern (ACEC). The Forest Creeks Research Natural Area is also addressed in the resource management plan. The North Fork WSA within the planning area is addressed in the BLM Final Oregon Statewide Environmental Impact Statement. The River Management Plan is in conformance with the WSA interim management and with the ACEC and RNA management direction. Copies of the Brothers/LaPine RMP are available at the Bureau's Prineville District Office located in Prineville, Oregon.

U.S. Forest Service, Ochoco National Forest (USFS)

In 1989, the U.S. Forest Service completed the Ochoco National Forest Land and Resource Management Plan (LRMP). This comprehensive land and resource management plan guides natural resource management activities and establishes management standards and guidelines. The Ochoco National Forest manages 45 percent of the lands within the river corridor. The Ochoco LRMP included an Environmental Impact Statement which documented the environmental consequences of the plan. It also describes resource management practices, levels of resource production and management, and availability and suitability of lands for resource management. The North Fork Crooked River is a special land use allocation in the LRMP with a specific set of standards and guidelines. This River Management Plan revises some standards and guidelines, in most cases giving more specific direction for land management within the river corridor. A copy of the LRMP is available at the Ochoco National Forest Supervisor's Office in Prineville, Oregon.

U.S. Fish and Wildlife Service (USFWS)

The USFWS administers the Endangered Species Act of 1973 (as amended). The BLM and U.S. Forest Service consult with this agency to develop a formal biological opinion on the appropriate courses of action when a threatened or endangered species, or its critical habitat, may be affected by a proposed management action. Final decisions could result in the proposed action being modified or abandoned.

Confederated Tribes of the Warm Springs Reservation of Oregon

The North Fork Crooked River management area is located outside the Warm Springs Reservation and was ceded to the U.S. Government by the Tribes and Bands of Middle Oregon through ratified treaty. The Tribes reserve some rights and privileges in the Treaty. The interests of contemporary Native Americans include the protection of Indian burial grounds and other sacred sites and the perpetuation of certain traditional activities, including root gathering, fishing, and hunting.

The Confederated Tribes of the Warm Springs Reservation of Oregon are consulted by federal, state, and local governments as required by the Archaeological Resources Protection Act (1979) and as recommended by the Historic Preservation Act (1966). The managing agencies also contact and consult with the appropriate Tribal and Bureau of Indian Affairs representatives on projects or activity planning on BLM, Forest Service, or State administered lands that may affect Tribal interests, treaty rights, or traditional use areas within ceded lands.

Oregon State Parks and Recreation

The Oregon State Parks and Recreation Department is responsible for the acquisition, improvement, maintenance, and operation of Oregon's state park system. State Parks is also responsible for giving technical assistance to local government agencies on park matters, develops and maintains the Statewide Comprehensive Outdoor Recreation Plan (SCORP), and administers the Federal Land and Water Conservation Fund matching grant program in Oregon.

The Oregon State Parks and Recreation Department also administers the Scenic Waterway Program. The program includes the review of new land use and land management practices, and the right for the Department to make application for instream water rights for recreation purposes in State Scenic Waterways. The North Fork is not a designated State Scenic Waterway, however, the SCORP recommends this river be considered for future State Scenic Waterway status. Oregon State Parks Department works closely with County planning staff and other state agencies to insure development on private lands is compatible with the river environment.

Oregon Department of Fish and Wildlife (ODFW)

The ODFW is responsible for the management and wise use of the State's fish and wildlife resources. The Department is responsible for maintaining optimum numbers of indigenous fish and wildlife, and to ensure that no species are threatened with extinction. The Department is responsible for developing and administering fish and wildlife regulations. ODFW, BLM, USFS, Confederated Tribes of the Warm Springs Reservation and other interested groups work cooperatively in riparian habitat enhancement projects, fish and wildlife enhancement projects, and the Deschutes and Crooked River basin planning efforts. ODFW monitors fish and wildlife species and numbers within the river planning area.

Oregon Water Resources Department (WRD)

The WRD is responsible for management and allocation of the state's water resources. The Water Resource Commission develops policy by preparing basin plans for each of Oregon's 18 river basins. Through basin plans, the WRD classifies streamflow for certain purposes, such as domestic, industry, municipal, recreation, or irrigation use. The plans are adopted as administrative rules which reflect how water is currently used, and how its future use will be allocated. Three State departments may apply for these instream rights: Parks and Recreation, Oregon Department of Fish and Wildlife, and Department of Environmental Quality. Once granted, the instream water right is held by WRD in trust for the people of Oregon.

Division of State Lands (DSL)

DSL regulates removal, fill, or alteration of 50 cubic yards or more of material in all waterways (including lakes and wetlands) in the state. In Scenic Waterways, State Land Board approval is required for any alteration of the bed and/or banks of a river or wetlands within a State Scenic Waterway, regardless of the amount of material moved. DSL is also responsible for managing certain lands for their maximum benefit to the Common School Fund consistent with best conservation practices and public trust values.

Department of Land Conservation and Development (DLCD)

The DLCD works with cities, counties, and State agencies to develop and maintain Oregon's comprehensive land use plans and regulations. One aspect of these responsibilities is to ensure that jurisdictions have included scenic, wildlife,

riparian and other resource values in their Goal 5 (Natural Resources) planning. To comply with Goal 5, counties must inventory the resource, identify conflicting uses which could impact the resource, and develop implementation strategies to resolve conflicting uses as identified. The resources identified in the inventory are then required to be protected through mandatory plans, policies, and zoning requirements.

Department of Forestry (DOF)

DOF is responsible for fire protection of 16 million acres of private, State, and Federal forests, detection and control of forest pests and forest tree diseases on State and private lands, and the management and rehabilitation of 785,000 acres of State-owned forest lands. DOF also administers the Oregon Forest Practices Act (OFPA), adopted in 1971 and most recently amended on August 3, 1992, which is governed by rules developed by the Board of Forestry. The purpose of the Act and rules is to encourage and enhance the growth and harvesting of trees while providing for the overall maintenance of air, water and soil resources, and fish and wildlife resources. Forest practices rules regulate reforestation, road construction and maintenance, harvesting, application of chemicals, and disposal of slash.

Included in the OFPA are rules designed to protect "riparian management areas". Under these rules, a proposed commercial forest operation within the riparian management area of a Class I stream must be described in a written plan. These plans are submitted to the DOF for approval. Written plans required for the purposes of the DOF must describe how the operation will be conducted to meet the minimum standards prescribed by the Act.

Department of Environmental Quality (DEQ)

The DEQ is responsible for the implementation of the Statewide Water Quality Management Plan, which establishes standards of water quality for each of WRD's 18 basins in Oregon. Beneficial uses of rivers and streams that are to be protected by DEQ are: public, private, and industrial water supplies, irrigation, livestock watering, anadromous fish passage, salmonid rearing and spawning, resident fish and aquatic life, wildlife and hunting, fishing, boating, and aesthetic quality. Dissolved oxygen is to be kept to the highest possible levels. Temperature, bacteria, dissolved chemical substances, and toxic material are to be maintained at the lowest possible levels. The DEQ anti-

degradation policy states that high quality waters are to be protected from degradation unless the Environmental Quality Commission finds it necessary to make an exception based on economic or social needs. DEQ also maintains water quality monitoring stations throughout Oregon.

Oregon State Police

The Department of State Police was created to serve as a rural patrol and to assist local law enforcement agencies. This agency is empowered to enforce all Oregon statutes without limitation by county or other political subdivision. State Police activities are coordinated with local and Federal law enforcement agencies and assisted by the general public.

Crook County

Crook County is responsible for regulating and zoning land use on private lands within the county. The Oregon Omnibus Wild and Scenic Rivers Act of 1988, the Federal Land Policy and Management Act of 1976, and the National Environmental Policy Act of 1969 (as amended) all encourage or mandate intergovernmental coordination, consultation and, where possible, plan consistency. The Wild and Scenic Rivers Act envisioned a high reliance on state and local comprehensive plans to achieve the objectives of the Act.

Crook County has submitted its update of State Goal 5 (Open Spaces, Scenic and Historic Areas, and Natural Resources) to the Oregon State Department of Land Conservation and Development and formal action is pending. Protection of National Wild and Scenic Rivers within the county will be accomplished by an update to the County Plan, within six months of publication of this document.

PUBLIC INVOLVEMENT

A public involvement plan was formulated at the beginning of the river planning process in 1989 to assure that citizens had many opportunities to share their issues and concerns with the planning agencies.

The public was involved in identifying concerns to be addressed in this River Management Plan beginning in August 1991. At this time, a draft resource assessment was released to the public and comments were solicited concerning the identification of five outstandingly remarkable values (scenery, recreation, wildlife, botany, and

riparian vegetation). The public agreed that these five values were indeed outstandingly remarkable.

The first issue of *The High Desert River News* was mailed to over 1,000 people in July 1991. Press releases, seven public meetings and meetings with most private landowners were also used to solicit public opinion and concerns.

The April 1992 issue of *The High Desert River News* informed the public of preliminary issues and alternatives to be considered. Few people responded specifically to these alternatives.

An Environmental Assessment and draft River Management Plan were sent to interested publics August 23, 1992 with a 60-day comment period. Thirty-five comments from landowners, local and state groups, state agencies, and other publics were received during the comment period. People were mostly concerned about grazing standards, restoration of water quality, fisheries, tribal rights, timber issues, recreation improvements and treatment of private lands within the river boundaries. As a result of these comments, the Forest Service and BLM modified the preferred alternative. This River Management Plan details the modification made to the preferred alternative. The decision document explains how public comments were considered in the final decision for the Ochoco National Forest and BLM. In addition, response to specific comments can be found in Appendix D, Response to Public Comments in this River Plan.

Key Issues

Key issues identified during the planning process included instream resources and riparian habitat; recreation opportunities; vegetation management; river boundary location; and public/private landowner cooperation.

Relationship to Existing Land Management Plans

This River Plan is an interagency effort and is tiered to both the BLM and Forest Service planning documents. Specifically, the management direction for BLM lands in Segments 4 through 6 will augment the BLM Brothers/LaPine Resource Management

Plan of 1989. The management direction for Forest Service lands in Segments 1 through 4 will become part of the Ochoco National Forest Land and Resource Management Plan of 1989.

This document triggers an amendment to the Ochoco National Forest LRMP. The Forest Plan provides direction for all resource management programs, practices, uses, and protection measures on the Forest. This plan is already in effect and will be amended to incorporate Standards and Guidelines in this River Plan. This will be added to Part I, Chapter 4 of the Forest Plan.

This document will serve as a subordinate activity plan which complements and implements portions of the Brothers/LaPine RMP. The RMP provides direction for all resource management programs, practices, uses, and protection measures on lands managed by the BLM in the river corridor.

The Crook County Comprehensive Land Use Plan will also be updated within 6 months of publication of this document to protect river values on private land.

RELATIONSHIP TO PRIVATE LAND MANAGEMENT

The Federal government has no authority to regulate or zone private lands. It may take steps to protect the river through easements purchased from landowners, land exchange or acquisition, or mitigation with willing landowners.

The Wild and Scenic Rivers Act specifically prohibits the use of condemnation in the fee title purchase of lands if 50 percent or more of the land within the boundary is already in public ownership (the North Fork falls into this category). If a land use or development clearly threatens the outstandingly remarkable values which resulted in the designation, efforts will be made to remove the threat through local zoning cooperation, land exchanges, purchases from willing sellers, and other actions. Scenic conservation or access easements through condemnation proceedings may be used but only as a last resort.

II

Management Direction



"Water is the giver of life. The veins in my body give every portion of my body life. Water enters and is the only thing that can touch the heart. The rivers run through the land to give it life."

≈ Louie H. Dick, Jr. ≈

CHAPTER II

MANAGEMENT DIRECTION

This River Management Plan explains desired future condition, goals, and standards and guidelines for the North Fork. Planning on National Forest and BLM land has two levels. The first level of planning is a programmatic level. It provides Forest and Area-wide standards and guidelines. The River Management Plan is in this category. The second level of planning is site specific project planning. Individual projects such as trails, fish improvements, or roads fall into this category. These are tiered to the first planning level document, require National Environmental Policy Act (NEPA) analysis, and are designed to achieve the goals and objectives described in the Ochoco National Forest and Prineville District, BLM planning documents.

OUTSTANDINGLY REMARKABLE AND SIGNIFICANT RIVER VALUES

Information from specialists in many disciplines, as well as individuals and groups familiar with the planning area was used to identify the outstandingly remarkable and significant river values using a regional Resource Assessment Process. Specific information about the type, quality, quantity and location of river values was obtained and used to confirm the Congressional record which lead to designation of the river. The outstandingly remarkable and significant river values identified include scenery, recreation, fish, wildlife habitat (bald eagle winter roost site), and botanical (sensitive plants, old growth ponderosa pine and areas of pristine riparian vegetation).

Scenery is an outstandingly remarkable value on all river segments. Along the 34.2 miles of designated river, scenic values include meadows, rocky cliffs, and old growth ponderosa pine forest. From its source at Williams Prairie, the river flows freely through open wet meadows, surrounded by ponderosa pine forest. Down stream from the river's confluence with Deep Creek the landscape elements include steep-sided volcanic canyons interspersed with old growth ponderosa pine forests and riparian meadows.

Recreation is an outstandingly remarkable value in Segments 4 and 5. The canyon sections of the river provide relatively pristine opportunities for fishing, hiking, hunting, and other semiprimitive experiences. The remoteness, solitude, natural beauty, and a wide variety of flora and fauna contribute to the recreation values in this area.

With enhancement fisheries values have the potential to be high, however the existing situation in much of the watershed and the resulting high stream temperatures affect the quality and quantity of the current fisheries. Wild rainbow/ redband trout, an Oregon State Sensitive, Class II species, occurs throughout the river. This species is also classified as a sensitive species by federal agencies. The opportunities presented in this river plan will enhance this fish population through habitat improvement.

Many wildlife species including muledeer, elk, coyote, and various birds of prey use the river corridor for feeding, nesting, shelter, or travel. Bald eagles, a federally listed endangered species, use the river corridor during the winter. **The presence of a bald eagle winter roost site is an outstandingly remarkable value in river Segments 5 and 6.**

There is a wide diversity of vegetation throughout the river corridor, including upland sagebrush/juniper/ mountain mahogany associations and deciduous riparian habitat. **Botanical values, including the presence of sensitive plant species such as *Calochortus longebarbatus* var. *peckii*, old growth ponderosa pine forests are significant values in Segments 1,2,3,4 and 5. Some sections of native riparian conditions in the Wilderness Study Area are outstandingly remarkable values in Segments 4 and 5.**

DESIRED FUTURE CONDITION OF THE RIVER CORRIDOR

This section describes the overall management goals and desired future condition of the river corridor. The combination of goals and desired future condition lead to the formulation of specific management activities, standards and guidelines which help achieve resource objectives. This vision can be achieved by close cooperation between Federal, State, and local agencies and individuals. The following Desired Future Condition statements are written as if resources were being described 10-20 years in the future.

Riparian: The riparian zone is in proper functioning ecological condition. It supports a diversity of native plants, supports bank stability, provides shade to maintain water temperature adequate for aquatic species and supports a healthy population of native and desired non-native birds and animals.

Fisheries/Stream Ecology: The biological and physical resources of the river support healthy populations of wild rainbow/ redband trout, other native fish species, and aquatic insects. The stream structure is in natural, functioning ecological condition.

Water Quality: Water temperatures do not exceed 2° F above the State Standard of 58° F for cold water trout fisheries. The minimum flow of water necessary to support native fish, maintain water quality, and support recreational and scenic values is available. Turbidity does not exceed natural levels. Water chemistry is monitored and sources of pollutants are identified and corrected in a timely manner.

Recreation: A wide range of recreation activities, both motorized and nonmotorized occur on public lands. Motorized, barrier-free access to the river for dispersed camping, hiking, mountain biking, wildlife viewing, nature photography, fishing for native trout, hunting, and swimming occur from Williams Prairie to Deep Creek campground. Semiprimitive and primitive recreation experiences occur from Deep Creek campground through the Wilderness Study Area, and include hiking on primitive trails, hunting big game animals, fishing for native trout, backpacking, riding pack animals, swimming, photography, and nature study. User education and information is emphasized over regulatory processes. Interpretive signing is used to enhance the visitors' experience and to protect resource values. Recreation use may increase slightly but will not exceed the recreation capacity of each area.

Scenery: The outstandingly remarkable scenic values of the river are protected and enhanced. Foreground river views appear natural with few manmade intrusions. Management activities are not evident to the casual observer. Contrasts of form, line, color, texture, and sound are achieved throughout the river corridor. Large, platy-barked ponderosa pine, larch, aspen, and willow, a ribbon of riparian vegetation along the river, open grassy meadows seasonally filled with wildflowers, steep, rust-colored basalt canyon walls, the rippling river, and the sights and sounds of an abundance of wildlife all contribute significantly to scenic values.

Wildlife: The river corridor supports a wide diversity of wildlife ranging from those dependent on wet meadow ecosystems, old growth, and riparian areas, to those dependent on upland scablands, rocky cliffs, and talus slopes. The river serves as a major travel corridor, safety area, and food source for many species. The winter bald eagle roost sites support wintering birds. Wildlife viewing opportunities are abundant.

Vegetation: All vegetation is managed to enhance or protect scenic qualities. The immediate river environment appears natural, though there is some evidence of past management activities in recreation classified segments. Fire, thinning, and timber harvest, as well as vegetative planting occur to maintain natural ecological diversity. The outstandingly remarkable riparian habitat in

Segment 5 is maintained, while riparian habitat in other segments is enhanced. Sensitive plant species such as Peck's mariposa lily are abundant and thriving.

Cultural Resources: Cultural, historic, and traditional use sites are identified and protected. The past history of the area is interpreted in several places for visitor enjoyment and education.

Public/Private Cooperation: The rights of private property owners are fully respected. As a result of successful land management actions on the public lands along the river, private landowners fully participate in managing the outstandingly remarkable and significant river values that occur on their private property. Partnerships with many private landowners, clubs and citizen groups to protect and enhance the river values commonly occur.

MANAGEMENT GOALS AND OBJECTIVES

The overall goal for the designated Wild and Scenic River corridor is:

The North Fork Crooked River will be protected as a free-flowing river with a diverse, dynamic, sustainable ecosystem, ranging from wet prairies to basalt canyons. All future river management or activities occurring within its boundaries will maintain and enhance the outstandingly remarkable river values for which the river was designated, including scenic, wildlife, botanical, and recreation values.

Several resource management objectives guided development of the river plan and include:

- * Manage resource activities to maintain and restore habitat within the wild and scenic corridor and its tributary watersheds to prevent degradation of outstandingly remarkable and significant river values.
- * Maintain, protect and restore habitat on public lands within the river corridor to meet or exceed goals identified in the Oregon Department of Fish and Wildlife's Crooked River Fish Management Plan.
- * Provide a diversity of appropriate recreation opportunities in the river corridor ranging from motorized viewing opportunities to opportunities for solitary experiences in remote wilderness areas.
- * Manage the watershed within the river corridor to enhance water quality by utilizing Best Management Practices.
- * Through the use of educational signing, brochures and maps, educate river visitors about land use etiquette and the rights of private property owners within the river corridor.
- * Design and build facilities that harmonize with the river's natural setting.
- * Provide opportunities for viewing the scenic landscape within the river corridor using viewpoints, a trail, dispersed campsites, a developed campground, and a variety of roads.
- * New and existing facilities will be designed to provide barrier-free access where feasible to provide opportunities for physically challenged people.
- * The present diversity of wildlife species will be maintained and in some cases increased through resource management practices.

- * Cultural resource surveys and evaluations will be conducted and management recommendations will be provided as appropriate.

Objectives by river segment are:

- * Segment 1: Emphasize riparian improvement, maintain a meadow ecosystem and Roaded Natural recreation opportunities including dispersed camping. Federal land is characterized by predominantly natural-appearing environments with moderate evidence of the sights and sounds of man. Such evidence usually harmonizes with the natural environment. Interaction between users may be moderate to high, with evidence of other users prevalent. Resource modification and utilization practices are evident, but harmonize with the natural environment. Conventional motorized use is allowed.
- * Segment 2: Maintain a Roaded Natural setting using viewpoints and the developed campground to inform visitors about the Wild and Scenic River. Federal land is characterized by predominantly natural-appearing environments with moderate evidence of the sights and sounds of man. Such evidence usually harmonizes with the natural environment. Interaction between users may be moderate to high, with evidence of other users prevalent. Resource modification and utilization practices are evident, but harmonize with the natural environment. Conventional motorized use is allowed and incorporated into construction standards and design of facilities.
- * Segments 3&4: Manage for Semiprimitive Nonmotorized recreation opportunities. Identify some system roads for motorized access to facilitate dispersed recreation. Continue riparian and stream enhancement. Federal land is characterized by a predominantly natural or natural-appearing environment. Interaction between users is low, but there is often evidence of other uses. Federal land is managed in such a way that minimum on-site controls and restrictions may be present, but would be subtle. Use of existing roads will be restricted to minimize impacts on recreational experience opportunities and river resources.
- * Segment 5: Maintain and enhance Primitive Nonmotorized recreation opportunities. Maintain areas of pristine riparian vegetation. Federal land is characterized by an essentially natural environment. Interaction between users is very low and evidence of other users is minimal. The area is managed to be essentially free from evidence of human-induced restriction and controls. Motorized use within the area is not permitted except for permittees, water right holders, private landowners, and emergency administrative use.
- * Segment 6: Enhance riparian areas and streambank stability. Cooperate with private landowners to reduce public trespass and enhance water quality. Federal land is characterized by a predominantly natural or natural-appearing environment. Concentration of users is low, but there is often evidence of other users. Federal land is managed in such a way that minimum on-site controls and restrictions may be present, but would be subtle. Motorized use of local primitive or collector roads with predominantly natural surfaces is permitted.

SUMMARY OF MANAGEMENT DIRECTION

Management direction in this plan emphasizes protection and enhancement of scenic values through riparian improvement and upland vegetation management. Fisheries and water quality will be improved. Commodity outputs such as timber and grazing will be slightly reduced or changed to protect scenic values and enhance water quality. A broad range of recreation settings from Roaded Natural to Primitive are provided to meet projected demand. Cooperation between the Bureau of Land Management and Ochoco National Forest will continue under a Memorandum of Understanding, and by pursuing specific actions identified in this river plan, including an instream flow study, recreation use surveys and fish enhancement projects.

Instream Resources and Riparian Habitat

Within the limits of ecological potential, riparian areas will be managed for a shady, brushy condition with a canopy of alder, willow, aspen, or other deciduous vegetation. Streamside vegetation and habitat will be managed to maintain and improve water quality. Where coniferous trees are a natural component of the ecosystem, a variety of size classes will exist to perpetuate the supply of shade and woody debris over time. Sites unable to support a canopy of deciduous or evergreen species will be characterized by vigorous stands of forbs, grasses, and grass-like riparian species.

Restoration of riparian areas in all river segments with unsatisfactory conditions would occur using techniques such as beaver reintroduction, intensive livestock management, placement of instream structures, planting vegetation, dispersing livestock away from the riparian zone, or other site specific techniques determined necessary. All site specific projects will meet long term river management goals.

The Forest Service and BLM will cooperate with ODFW, Indian tribes, other agencies, and landowners to improve instream water quantity and quality. The Forest Service and BLM will cooperatively develop a water quality monitoring plan and conduct an instream flow study to determine minimum flows necessary to maintain the river's outstandingly remarkable and significant river values. Information from instream flow studies conducted by ODFW will also be used.

On Forest Service managed lands in Segments 1-4, changes in livestock management will occur at the project specific level through changes in the Allotment Plans. Four out of the five allotments within the river corridor are working towards improved range and riparian conditions (Appendix E). The Big Summit Allotment has incorporated Wild & Scenic River objectives. The Roba Allotment will be completed within one year. Completion of the remaining three AMPs (Fox Canyon, Antler, and Gray Prairie) will depend upon funding, national and regional priority, available resources, and results of monitoring data. Until the AMPs are revised and consistent with River Plan and Forest Plan objectives, these allotments within the river corridor will begin achieving desired future condition through revision of the annual operating plans. These short-term changes will be guided by the assumption derived by comparing similar watersheds to existing condition.

Inventory and monitoring of riparian vegetation and water quality will play a key role in setting future management activities and parameters. Exclosures will be built in several areas of Forest Service land to identify unimpeded (uninhibited) recovery rates. Comparison of information on plant growth and stream morphology inside the exclosures to the same parameters outside the exclosures will assist in identifying the Best Management Practices to achieve ecological potential along the entire river corridor.

On BLM lands in Segments 4-6, management practices that accelerate riparian and water quality improvement will be identified and implemented. Practices such as season-of-use grazing, sequential annual rest treatments and riparian pastures will be used to maintain proper ecological status or improve riparian conditions. See Appendix F for a current description of the riparian condition on BLM land.

Recreation

Recreation use levels have been identified by specifying the recreation opportunity setting for each river segment. Recreation use will be monitored during peak season, with daily use figures gathered at developed sites. If recreation use monitoring shows unexpected, rapid increase in visitation, further management action and monitoring will occur. Management actions may include rerouting use patterns, making campsites more durable, or closing overused sites.

Recreation use is not expected to increase in Segments 1 or 6. The improvement of Deep Creek campground and construction of viewpoints in Segment 2 may result in more visitors in Segments 2 and 3. Development of a low standard trail near Deep Creek campground may result in more use in Segment 3 and along Deep Creek. This increased use is expected to remain below site capacity for at least the next 10 years.

Motorized access will meet the ROS objectives of each river segment. In Segments 1 and 2, some roads will be closed on a temporary basis (until needed for future management activities), including Forest Roads 4225-010, 4225-051, 4225-072, and 4225-141. Some roads in Segment 3 will be closed on a permanent basis to implement the Semiprimitive Nonmotorized recreation objectives, possibly including Forest Roads 4260-341, 4260-342, 4240-157, 4240-159, and 4240-156 where they go below the canyon rim. Forest Service Road 4260-230 in Segment 3, will remain open to the dispersed campsite on the river.

Upland Vegetation

A Vegetative Management Plan will be developed by BLM and Forest Service respectively, for all segments. After treatment of vegetation prescribed fire will be considered as one of the tools used to achieve the desired resource conditions. All wildfires will be suppressed until the vegetation management plan is completed. On Forest Service managed lands, large platy-barked ponderosa pine and open meadows will continue to be present. On BLM managed land, upland vegetation will be managed toward a goal of mid-seral (25-50 percent of vegetative potential) to late seral (50-75 percent of potential).

Wildlife

Wildlife management practices within the river corridor will comply with State and Federal laws, and Standards and Guidelines in the Ochoco National Forest LRMP and the BLM Brothers/LaPine RMP.

On Forest Service managed lands within Segments 2 and 3, two special wildlife management allocations exist; an Old Growth area and Winter Range. Species such as big game use these areas for thermal and hiding cover. These sites feature multi-layered forest canopies with shaded forest floors. Snag density will conform to Forest Plan standards and guidelines. Big game cover will be allowed to cycle through natural processes. Open road density will be minimized to protect natural values, including threatened and endangered species, sensitive species, and big game habitat.

On BLM managed lands the optimum diversity for wildlife species will be provided, given limits on types of projects authorized within the Wilderness Study Area (WSA) and Research Natural Area (RNA). This means that vegetation types will be managed so that each of the seral stages are represented in an area. Techniques outside the WSA and RNA segments could include using selective vegetation removal, biological controls, or prescribed and natural fires.

Private Lands

Cooperative projects with willing landowners that protect or enhance river values, water quality, or water quantity will be encouraged. Federal agencies will share information concerning the many landowner incentives programs available for improvements on private lands. A list of the types of landowner incentive

projects available is found in the book "Promoting Voluntary Landowner Cooperation; Private Landowner Incentives on Wild and Scenic Rivers", December 1991. Projects include grants, partnerships, and cooperative agreements.

Acquisition of private lands within the river corridor will be pursued with willing landowners. Land exchanges will be the preferred means of land transfer. If private lands in Segments 4 through 6 come into BLM ownership, the timber will be withdrawn from commercial timber harvest to protect river values. The Forest Service would consider land exchange for private lands near Upper Falls if the landowner and County are willing and funds are available for land surveys.

Uses on private lands along the river corridor will be regulated by Crook County zoning ordinances and applicable state and federal laws. Crook County has submitted its periodic review for Goal 5 Resources to the State Department of Land Conservation and Development and formal action is pending.

Boundaries

The written description of the river boundaries to be recommended for adoption by the United States Congress is located in Appendix G. Land ownership by river segment is shown in Table 1. The Wild and Scenic Rivers Act allows a maximum average of 320 acres per river mile to be included in the river boundaries. The North Fork Crooked River boundaries average 317 acres per river mile.



TABLE 1. Land ownership within final North Fork Crooked River boundaries.

Segment	BLM (acres)	Forest Service (acres)	Private (acres)	Total (acres)	River (miles)
1	40	1260	160	1460	4.6
2		1399		1399	4.5
3		2029		2029	6.3
4	80	200	450	730	2.2
5	3680		480	4160	11.9
6	190		870	1060	4.7
Total	3990 (37%)	4,888 (45%)	1960 (18%)	10838 (100%)	34.2

If segment changes are ever revisited by Congress, BLM recommends that the division between Segment 5 (Wild) and Segment 6 (Recreation) be moved to the mouth of Mud Creek. In the event that the WSA is designated Wilderness, BLM recommends that the division between Segments 5 and 6 be coordinated with the delineation of the Wilderness boundary.

MANAGEMENT AREA STANDARDS AND GUIDELINES

The following standards and guidelines (S&Gs) explain the bounds or constraints within which all management practices will be carried out to achieve the planned goals, objectives, and desired future condition of the North Fork Crooked River on land managed by the Ochoco National Forest and Bureau of Land Management. These standards and guidelines supplement policy direction found in BLM and Forest Service Manuals and Handbooks and the Regional Guide for the Pacific Northwest. They also comply with applicable State and Federal laws and regulations. In addition the S&Gs complement and in some cases supersede the standards and guidelines written for each management area in the Ochoco National Forest Land and Resource Management Plan (Forest Plan), 1989 and the Brothers/LaPine Resource Management Plan (RMP), 1989.

Management areas to which Forest Plan standards and guidelines apply are referred to as North Fork Crooked River Recreation Corridor (MA-F23) and North Fork Crooked River Scenic Corridor (MA-F24). MA-F23 corresponds to designated Segments 1 and 2, from the river's source at Sera Springs to the mouth of Deep Creek, not including the private lands on Big Summit Prairie. These areas were classified as "Recreational river". MA-F24 corresponds to Segment 3, from the mouth of Deep Creek to the southern Forest Service land boundary above Upper Falls. The Forest Plan will be amended to include the Forest Service managed lands on the west side of the river in Segment 4. These river segments are classified as "Scenic river". Standards and guidelines will also apply to BLM managed land in Segments 4, 5 and 6. Segment 4 is classified as "Scenic river", Segment 5 is classified as "Wild river", and Segment 6 is classified as "Recreational river".

Instream Resources and Riparian Habitat

Standard and Guideline

Maintain 85% of unimpeded (uninhibited) recovery rate within riparian zones as measured through monitoring strategies such as site specific exclosures or other techniques.

Applicable Management Area

MA-F23 North Fork Crooked River Recreation Corridor
MA-F24 North Fork Crooked River Scenic Corridor

Standard and Guideline

100% of the potential streamside shade will be attained. Potential will be tied to seral stages recognizing that 100% shade over an entire stream is not sustainable over the long term.

Applicable Management Area

MA-F23 North Fork Crooked River Recreation Corridor
MA-F24 North Fork Crooked River Scenic Corridor

Standard and Guideline

Provide suitable amounts of instream structures such as large woody material and rocks, based on specific characteristics of riparian areas and stream morphology.

Applicable Management Area

MA-F23 North Fork Crooked River Recreation Corridor
MA-F24 North Fork Crooked River Scenic Corridor
BLM Segments 4,5,6

*** Standard and Guideline**

Meet State Department of Environmental Quality stream turbidity standards. Monitor to determine long term turbidity patterns.

Applicable Management Area

MA-F23 North Fork Crooked River Recreation Corridor
MA-F24 North Fork Crooked River Scenic Corridor
BLM Segments 4,5,6

*** Standard and Guideline**

Stream channel cutbanks will not exceed the occurrence found in a natural stream as determined through long term monitoring. Until natural stream morphology is established do not exceed an average of 20% cutbanks on any given stream drainage.

Applicable Management Area

MA-F23 North Fork Crooked River Recreation Corridor
MA-F24 North Fork Crooked River Scenic Corridor

*** Standard and Guideline**

Where feasible, water sources will be developed outside the river corridor to disperse livestock.

Applicable Management Area

MA-F23 North Fork Crooked River Recreation Corridor

MA-F24 North Fork Crooked River Scenic Corridor

BLM Segments 4,5,6

*** Standard and Guideline**

Existing water temperatures at or above 58° F will not be increased. Temperatures at or below 56° F may not be raised above 2° F. Where stream temperatures exceed 58° F, management activities will include objectives for reducing temperatures to levels that will improve fish habitat capability.

Applicable Management Area

MA-F23 North Fork Crooked River Recreation Corridor

MA-F24 North Fork Crooked River Scenic Corridor

BLM Segments 4,5,6

Recreation

*** Standard and Guideline**

Develop a low standard nonmotorized trail in keeping with ROS and visual guidelines, near Deep Creek campground.

Applicable Management Area

MA-F23 North Fork Crooked River Recreation Corridor

MA-F24 North Fork Crooked River Scenic Corridor

Standard and Guideline

Manage for the Recreation Opportunity Class of Roded Natural.

Applicable Management Area

MA-F23 North Fork Crooked River Recreation Corridor

BLM Segment 6

*** Standard and Guideline**

Manage for the Recreation Opportunity Class of Semiprimitive Nonmotorized except for specific, identified areas of Semiprimitive Motorized access.

Applicable Management Area

MA-F24 North Fork Crooked River Scenic Corridor

BLM Segment 4

*** Standard and Guideline**

Manage for the Recreation Opportunity Class of Primitive.

Applicable Management Area

BLM Segment 5

Access

*** Standard and Guideline**

Road management objectives in Recreation classified river segments will meet Retention visual quality as viewed from the river and Roaded Natural objectives. Human activities will not be evident to the casual viewer.

Applicable Management Area

MA-F23 North Fork Crooked River Recreation Corridor
BLM Segment 6

*** Standard and Guideline**

Access for permittees, private landowners, water-rights holders, and administrative use will be allowed.

Applicable Management Area

MA-F23 North Fork Crooked River Recreation Corridor
MA-F24 North Fork Crooked River Scenic Corridor
BLM Segment 4,5,6

*** Standard and Guideline**

Road management objectives in Scenic classified river segments will meet Retention visual quality as viewed from the river and Semiprimitive Motorized objectives. Human activities will not be evident to the casual viewer. In Semiprimitive Nonmotorized areas, roads will be obliterated.

Applicable Management Area

MA-F24 North Fork Crooked River Scenic Corridor
BLM Segment 4

*** Standard and Guideline**

In Wild classified river segments, roads will be closed. Motorized access will not be permitted, except for permittees, water-right holders, private landowners, and emergency administrative use.

*** Applicable Management Area**

BLM Segment 5

Standard and Guideline

Motorized use restricted to identified system roads.

Applicable Management Area

MA-F23 North Fork Crooked River Recreation Corridor
MA-F24 North Fork Crooked River Scenic Corridor

*** Standard and Guideline**

Motorized use restricted to identified road systems with a grade of 20% or less.

Applicable Management Area

BLM Segment 4,6

*** Standard and Guideline**

Non-system trails (those developed by casual hikers, wildlife and livestock) will be closed, rerouted, or improved to the appropriate development scale if resource damage occurs. Resource damage will be determined through monitoring and appropriate mitigation will be determined through site specific project analysis.

Applicable Management Area

MA-F23 North Fork Crooked River Recreation Corridor
MA-F24 North Fork Crooked River Scenic Corridor
BLM Segments 4,5,6

Facilities

Standard and Guideline

Recreation developments (such as restrooms, firepits, and designated campsites) will be provided when needed to protect resources or sites. Dispersed campsites will be monitored periodically for safety hazards (water sources, hazard trees) and resource damage. If monitoring determines that resource damage is occurring, site specific mitigation measures will be taken that may include closing, relocating, or rehabilitating the site.

Applicable Management Area

MA-F23 North Fork Crooked River Recreation Corridor
MA-F24 North Fork Crooked River Scenic Corridor

Standard and Guideline

Dispersed campsites will be monitored periodically for safety hazards and resource damage. If monitoring efforts determine that resource damage is occurring, site specific mitigation measures will be taken that may include closing, relocating, rehabilitating, or developing the site in such a way as to minimize resource damage.

Applicable Management Area

BLM Segments 4,5,6

*** Standard and Guideline**

Develop facilities to complement recreational opportunities and protect resource values, in a manner consistent with management area emphasis and desired future condition. Reconstruct Deep Creek campground to provide potable water and barrier-free access as a minimum.

Applicable Management Area

MA-F23 North Fork Crooked River Recreation Corridor

*** Standard and Guideline**

Provide scenic overlooks and interpretive signing to compliment recreation use of the area and educate visitors.

Applicable Management Area

MA-F23 North Fork Crooked River Recreation Corridor

Scenic Resources

*** Standard and Guideline**

Manage for the Visual Quality Objective (VQO) of Retention in foreground views, and Partial Retention in middleground views as viewed from the river. In the foreground views, human activities will not be evident to the casual visitor. In the middleground views, human activities may be evident, but will remain subordinate to the characteristic landscape.

Applicable Management Area

MA-F23 North Fork Crooked River Recreation Corridor

MA-F24 North Fork Crooked River Scenic Corridor

BLM Segments 4,6

*** Standard and Guidelines**

Manage for the VQO of Preservation in foreground and middleground views, and Retention in background views as viewed from the river. Foreground and middleground views will allow only ecological changes to occur. Human activities, in the background views, will not be evident to the casual visitor.

Applicable Management Area

BLM Segment 5

Fire

*** Standard and Guideline**

Prescribed fire to protect and enhance outstandingly remarkable and significant values will be allowed except within the RNA segments. Prescribed fire may be used to reduce fuel loads, manage habitat and forage, or control vegetation in weed infestation areas. In the WSA use of prescribed fire is restricted.

*** Applicable Management Area**

BLM Segment 4,5,6

Timber

*** Standard and Guideline**

No scheduled timber harvest, in foreground views from the river, shall be allowed. Timber harvest as necessary to maintain or enhance scenic, recreational, or water quality objectives may be permitted.

Applicable Management Area

MA-F23 North Fork Crooked River Recreation Corridor

MA-F24 North Fork Crooked River Scenic Corridor

*** Standard and Guideline**

Timber harvest, woodcutting, and plant gathering within the RNA, ACEC, and WSA will not be allowed, except for the exercise of valid Tribal rights.

Applicable Management Area

BLM Segments 4,5,6

Standard and Guideline

No salvage allowed.

Applicable Management Area

BLM Segment 5

*** Standard and Guideline**

Salvage harvest will not normally be allowed unless catastrophic events such as fire or insect outbreak occur. Harvest will be done in such a way as to protect and enhance the river values.

Applicable Management Area

MA-F23 North Fork Crooked River Recreation Corridor

MA-F24 North Fork Crooked River Scenic Corridor

BLM Segment 4

Botany*** Standard and Guideline**

The outstandingly remarkable botanical values within the river corridor will be protected and monitored. This includes the riparian vegetation in Segment 5, and populations of threatened, endangered, and sensitive plants including *Calochortus longebarbatus* var. *peckii* (Peck's mariposa lily) found throughout the river corridor.

Applicable Management Area

MA-F23 North Fork Crooked River Recreation Corridor

MA-F24 North Fork Crooked River Scenic Corridor

BLM Segments 4,5,6

Fish and Wildlife Habitat*** Standard and Guideline**

The documented bald eagle roost sites will be protected in Segments 5 and 6. The eagle roost sites in Segment 6 will be protected through an appropriate land transaction.

*** Applicable Management Area**

BLM Segment 5,6

*** Standard and Guideline**

Williams Prairie will be managed as a sustainable meadow ecosystem, including the reintroduction of fire.

Applicable Management Area

MA-F23 North Fork Crooked River Recreation Corridor

*** Standard and Guideline**

Wild rainbow/reddband trout will be managed for natural production consistent with the Oregon Department of Fish and Wildlife Management Plan for the river.

Applicable Management Area

MA-F23 North Fork Crooked River Recreation Corridor

MA-F24 North Fork Crooked River Scenic Corridor

BLM Segments 4,5,6

Cultural Resources

*** Standard and Guideline**

Traditional Native American uses and access to ceded lands will be allowed.

Applicable Management Area

MA-F23 North Fork Crooked River Recreation Corridor

MA-F24 North Fork Crooked River Scenic Corridor

BLM Segments 4,5,6

Boundaries

*** Standard and Guideline**

Existing BLM and Forest Service management plans will be changed to include the river boundary (Map 2) as described in the legal boundary description on file at both the Ochoco National Forest Supervisor's Office and Bureau of Land Management Area Office, located in Prineville, Oregon (see Appendix G).

Applicable Management Area

MA-F23 North Fork Crooked River Recreation Corridor

MA-F24 North Fork Crooked River Scenic Corridor

BLM Segments 4,5,6

Private Lands

*** Standard and Guideline**

Private landowner rights will be fully respected.

Applicable Management Area

MA-F23 North Fork Crooked River Recreation Corridor

MA-F24 North Fork Crooked River Scenic Corridor

BLM Segments 4,5,6

*** Standard and Guideline**

County zoning, the State Forest Practices Act, and other applicable state and federal laws will be the primary means of protecting river values on private land.

Applicable Management Area

MA-F23 North Fork Crooked River Recreation Corridor

MA-F24 North Fork Crooked River Scenic Corridor

BLM Segments 4,5,6

*** Standard and Guideline**

Cooperative projects between private landowners, private organizations, Indian tribes, federal and state agencies will be pursued where needed to protect and enhance river values and water quality and quantity.

Applicable Management Area

MA-F23 North Fork Crooked River Recreation Corridor

MA-F24 North Fork Crooked River Scenic Corridor

BLM Segments 4,5,6

III

Implementation and Monitoring



"The current is the stream of energy
which flows out of the soil into plants,
thence into animals, thence back into the
soil in a never ending circuit of life."

≈ Aldo Leopold ≈

CHAPTER III

IMPLEMENTATION AND MONITORING

IMPLEMENTATION

The projects contained in this plan will be translated into multi-year program budget proposals that identify needed expenditures. The budget proposals are submitted through normal Forest Service and BLM budget processes. A final budget for any Fiscal year (October 1 - September 30) is the result of negotiation between the Congress of the United State and the Administration as well as an allocation process among all the Forest Service and BLM units by their higher offices. The actual amount of work accomplished depends on the final budget, which may vary greatly from the requested budget. It is not possible to guarantee when proposed projects, or the management direction stated in this plan will be fully implemented.

This River Management Plan will be kept by the Ochoco National Forest Recreation Group Leader and the Bureau of Land Management, Central Oregon Resource Area, Supervisory Outdoor Recreation Planner. It will be their responsibility to ensure that the various resource programs are aware of the action and monitoring items in the Plan and are included in outyear budgeting and program planning. The Ochoco National Forest District Rangers and BLM, Central Oregon Resource Area Manager will be responsible for ensuring that this Plan is implemented on the ground.

The managers of the agencies, Forest, or administrative unit may change proposed implementation schedules through allocation of the Forest or Regional budget. These changes will not require an amendment to this plan. Priorities for completion are expressed by the year projected for completion. When a project consists of various items, all steps of that project are included in the estimated costs.

Management of the Wild and Scenic River is an integrated program. All work activity that will take place is included here. These funds will not be limited to recreation monies but include benefitting resource areas. Cost for implementation of this plan have been combined into four categories. These include: annual program management, operation and maintenance, facilities and projects, and monitoring. Much of the cost expressed here is a continuation of programs that existed before river designation. Costs are based on 1992 dollar values and cover those items anticipated for completion in the next ten years. By limiting discussion to the next ten years, some planned items of work will not be included.

Any ground disturbing projects listed below must undergo site specific environmental analysis prior to project implementation. This will include the appropriate environmental analysis documentation required by the National Environmental Policy Act of 1976 (NEPA), biological evaluation, cultural resource inventory, and any other site specific analysis necessary.

IMPLEMENTATION SCHEDULE

Annual Program Management

Funding for program management includes development of education and information programs, development of maps and brochures, vehicle costs, equipment charges, and overhead charges.

	Total Cost	Responsible Agency
Administrative Overhead (yearly)	\$ 3,000	FS
	4,000	BLM

Operation and Maintenance

The river corridor includes one developed campground, many dispersed campsites and user made trails. In addition, as facilities are added or upgraded, including Deep Creek campground, scenic overlooks, and trails, operation and maintenance costs will increase.

	Total Cost	Responsible Agency
Operation and maintenance costs (yearly)	\$ 9,000 2,000	FS BLM

Facilities and Projects

	Completion Period (yrs)	Total Cost	Responsible Agency
<i>INSTREAM RESOURCES AND RIPARIAN MANAGEMENT</i>			
1. Develop and implement a Water Quality Monitoring Program	0-2	\$ 50,000	FS, BLM
2. Construct fish screens	0-2	10,000	BLM
3. Revise Allotment Management Plans within corridor			
Roba AMP	0-1	2,000	FS
Fox Canyon AMP	2-5	2,000	FS
Antler AMP	5+	2,000	FS
Gray Prairie AMP	5+	2,000	FS
4. Update Annual Operating Permits (4)	0-5	500	FS
5. Plant riparian vegetation	0-5	25,000	FS, BLM
6. Construct upland water sources	0-5	60,000	FS, BLM
7. Place instream structures	2-5	90,000	FS, BLM
8. Conduct flow study	2-5	50,000	FS, BLM
9. Implement accelerated riparian improvements	1-5	20,000	BLM
<i>VEGETATION MANAGEMENT</i>			
1. Map and inventory VQO	0-2	2,000	FS
2. Conduct threatened, endangered and sensitive plant surveys	ongoing	11,000	FS, BLM
3. Develop a Vegetation Management Plan	2-5	27,000	FS, BLM
4. Prescribed burns to maintain/enhance scenic/botanical values	5+	10,000	FS, BLM
<i>CULTURAL RESOURCES</i>			
1. Conduct cultural resource surveys	ongoing	10,000	FS, BLM
<i>RECREATION</i>			
1. Purchase and place Wild & Scenic River signs	0-2	5,000	FS, BLM
2. Close and rehabilitate roads not in keeping with ROS	0-2	40,000	FS, BLM
3. Close, reroute, or rehabilitate trails as needed	ongoing	10,000	BLM
4. Improve or close dispersed sites as needed	ongoing	20,000	FS, BLM
5. Develop low standard trail in Segments 2 & 3	2-5	60,000	FS
6. Reconstruct Deep Creek campground	5+	200,000	FS
7. Construct scenic overlooks on Forest Service Road 42	5+	50,000	FS
8. Develop recreation management plan for Segment 4 (if acquired from willing seller)	if needed	12,000 6,000	BLM FS

	Completion Period (yrs)	Total Cost	Responsible Agency
<i>LAND ACQUISITION and TRADES</i>			
1. Acquire private lands from willing sellers (priority will be land exchanges)		75,000 100,000	BLM FS

PRIVATE LAND

- | | | | |
|--|------|-------|---------|
| 1. Develop cooperative projects with private landowners and other interested publics | 0-10 | 2,000 | FS, BLM |
|--|------|-------|---------|

BOUNDARIES

- | | | | |
|---|------------------|--------|---------|
| 1. Post boundaries in areas needed to avoid conflict/confusion with other management activities and private lands | 0-10 and ongoing | 10,000 | FS, BLM |
|---|------------------|--------|---------|

MONITORING

The objective of this monitoring plan is to determine if programs and projects are maintaining and enhancing the outstandingly remarkable and significant river values for which the river was designated. Monitoring is the repeated gathering and recording of pertinent information for comparison with, and evaluation of, goals, objectives, standards and guidelines. This data is then analyzed to determine trends and affects on the resources. Through the monitoring and evaluation process managers can determine how well the federal agencies are implementing the intent of the Wild & Scenic Rivers Act and determine the need for amendments or revisions to management direction.

Table 2. Monitoring Plan outlines the items to be monitored within the river corridor.

Table 2. Monitoring Plan for the North Fork Crooked River

Items to be Monitored	Unit of Measure	Method	Frequency	Threshold	Annual Cost	Responsible Agency
Water Quality • Temperature	Degrees	Thermographs	Annual	Over 58° F	\$400, \$1000 one time equipment purchase	Forest Service
Water Quality • Turbidity	Parts per million	ISCO sampler	Annual	DEQ standards	\$1,000, \$6,000 one time equipment purchase \$27,000 (10 years)	Forest Service BLM
Water Quality • Bacteria, dissolved oxygen, nitrate, ph conductivity, temperature	Amount	Grab samples	Annual	DEQ standards	\$3,000	Forest Service
	Amount	Multi-channel data logger	Monthly	DEQ standards	\$30,000	BLM
Riparian Condition	% Shade	Bottom Line Survey (BLS)	3 years	80% or less than 100% of potential	\$500, \$100 one time equipment purchase	Forest Service
	Seral stage	Bank stability, bank damage rating	10 year cycle	100% of potential	\$200	BLM
	Seral stage	Aerial photography	5 years	100% of potential	\$200	BLM
Riparian Vegetation	% and type	Greenline system, Photo points	3 years, 5 years	None at this time	\$3,300, \$600 one time equipment purchase	Forest Service
	Seral stage, % and type	Comparative inventories	10 year cycle	100% of potential	\$200	BLM
Vegetative Condition	Condition evaluation on allotment	Range condition & trend transects, photo transects	3 years	If range in downward trend	\$500	Forest Service
Forage Utilization	85% unimpeded recovery	Exclosure comparisons, transects	3 years	Downward trend in vegetative recovery	\$2,000	Forest Service

Table 2. Monitoring Plan for the North Fork Crooked River(Continued)

Items to be Monitored	Unit of Measure	Method	Frequency	Threshold	Annual Cost	Responsible Agency
Stream Structure	% cutbanks	BLS	3 years	20% or more of river drainage	\$500	Forest Service
Stream Structure	Large woody debris	BLS	3 years	Less than natural occurrence	\$300	Forest Service
Stream Structure	Embedded-ness	Buckets/steel chain	3 years	None at this time	\$1500+, \$100 one time equipment purchase	Forest Service
Stream Channel	Channel morphology	Cross section	3 years	None at this time	\$1500	Forest Service
Wildlife/Stream Structure	# beaver	Direct counts	3 years	None at this time	\$300	Forest Service
Stream Health	Macroinvertebrates	2 sites, Biotic Condition Index (BCI)	3 years	None at this time	\$1250, \$500 one time equipment purchase	Forest Service
Fish Habitat	Fish habitat	Hankin/Reeves survey	3 years	None at this time	\$9000, \$500 one time equipment purchase	Forest Service
	Miles	Microhabitat techniques	3 years	None at this time	\$3000	BLM
Species Composition	Fish numbers	Electroshocking	3 years	None at this time	\$1000, \$1500 one time equipment purchase	Forest Service
Wildlife Habitat	Acres cover	HEI, snag counts, vegetation types	3 years	None at this time	\$7000	Forest Service
	Seral stage, % and type	Data comparisons	5-10 years	100% of potential	\$200	BLM
Threatened, Endangered, & Sensitive Animals	# of bald eagles, # roost sites occupied	Field surveys	Annual	No man caused loss of habitat	\$3000	BLM

Table 2. Monitoring Plan for the North Fork Crooked River(Continued)

Items to be Monitored	Unit of Measure	Method	Frequency	Threshold	Annual Cost	Responsible Agency
Threatened, Endangered, & Sensitive Plants	# of flowering stems	Field survey & plots	2 years	Detect no more than 30% decrease in population numbers w/90% confidence	\$500	Forest Service
Sensitive Plants & Animals	Occurrence observations	Indicator species within community types	10 years	No loss of habitat/species	\$100	BLM
Scenic Quality	Acres in each Visual Quality class	Monitor Timber Sales, photo inventory	5 years	If 10% of area not meeting VQO	\$1000	Forest Service
Cultural Resources	# of sites	Field survey	As needed for projects	No tolerance for disturbance w/o mitigation	\$1000	Forest Service, BLM
Recreation - Trails	Percentage of eroded trail to total	Field survey	5 years	20% or more erosion	\$1000	Forest Service, BLM
Recreation - Dispersed Sites	Percentage unvegetated area to number of sites	Field survey	5 years	20% or more of sites with no vegetation	\$1000	Forest Service, BLM
Access Management	Compliance with travel restrictions	Area patrols	5 times/year	5% noncompliance	\$1000	Forest Service, BLM

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APPENDIX A

Glossary



"The waters are deep and quiet, but
the swallows are swift and noisy."

≈ John Westly Powell ≈

ABBREVIATIONS AND ACRONYMS

Acronym	Definition
ACEC	Area of Critical Environmental Concern
AMP	Allotment Management Plan
AUM	Animal Unit Month
BLM	Bureau of Land Management
BMP	Best Management Practices
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
DEQ	Oregon Department of Environmental Quality
DLCD	Department of Land Conservation and Development
DOF	Department of Forestry
DSL	Division of State Lands
EA	Environmental Assessment
EIS	Environmental Impact Statement
FLPMA	Federal Land Policy and Management Act
FONSI	Finding of No Significant Impact
FS	Forest Service
FY	Fiscal Year
IDT	Interdisciplinary Team (ID Team)
LRMP	Land and Resource Management Plan
MOU	Memorandum of Understanding
NEPA	National Environmental Policy Act
NFCR	North Fork Crooked River
ODFW	Oregon Department of Fish and Wildlife
ORV	Outstandingly Remarkable Value
PL	Public Law (also P.L.)
R	Rural (ROS Classification)
RMP	Resource Management Plan
RN	Roaded Natural (ROS Classification)
RNA	Research Natural Area
ROS	Recreation Opportunity Spectrum
RVD	Recreation Visitor Days
SCORP	State-wide Comprehensive Outdoor Recreation Plan
SHPO	State Historic Preservation Officer (or Office)
SPM	Semiprimitive motorized (ROS Classification)
SPNM	Semiprimitive Nonmotorized (ROS Classification)
S&G	Standards and Guidelines
T,E,&S	Threatened, Endangered, and Sensitive Plant and Animal Species
USDA	United States Department of Agriculture
USDI	United States Department of the Interior
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
VQO	Visual Quality Objective
WRD	Water Resources Department
WSA	Wilderness Study Area
WSR	Wild and Scenic River
W&SR	Wild and Scenic River

GLOSSARY

These definitions apply to Forest Service and Bureau of Land Management (BLM) land management and planning. Meanings may differ when used in another context. Some definitions were shortened, paraphrased or adapted to fit local conditions. Definitions of other terms used in resource management but not included in this glossary may be found in the following publications:

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A

ALLOTMENT MANAGEMENT PLANS (AMP) - A written program of livestock grazing management, including supportive measures if required, designed to attain specific management goals in a grazing allotment.

ALTERNATIVE - One of several policies, plans, or projects proposed for decision making.

ANIMAL UNIT (AU) - An animal unit is a 1,000 pound mature cow, or its equivalent based on an average daily forage consumption of 26 pounds dry matter per day.

ANIMAL UNIT MONTH (AUM) - The amount of forage required by an animal unit for one month.

AQUATIC - Living or growing in or on the water.

ARCHAEOLOGY - The scientific study of the physical characteristics of cultural resources in order to describe and explain former ways of life.

B

BACKGROUND - The visible terrain beyond the foreground and middleground where individual trees are not visible, but are blended into the total fabric of the stand. (See "Foreground" and "Middleground.")

BEST MANAGEMENT PRACTICES (BMP) - A specific activity, measure, course of action, or treatment.

BIOLOGICAL DIVERSITY - The distribution and abundance of different plant and animal communities and species within the area covered by a land and resource management plan.

BIOLOGICAL EVALUATION (BE) - A specific process, required by the Forest Service as part of an environmental assessment, that evaluates the potential effects of a proposed project on proposed endangered, threatened, and sensitive species and their habitats; done for both plants and animals.

BIOLOGICAL POTENTIAL - The maximum possible output of a given resource limited only by its inherent physical and biological characteristics.

C

CATASTROPHIC EVENT - Total loss of resource values of a particular watershed.

CHANNEL - An open conduit either naturally or artificially created which periodically or continuously contains moving water or forms a connecting link between two bodies of water.

CHANNEL STABILITY - A relative term describing erosion or movement of the channel walls or bottom due to waterflow.

CLIMAX - The culminating stage in plant succession for a given site where vegetation has reached a highly stable condition.

COMMODITY - A transportable resource product with commercial value; all resource products that are articles of commerce.

CONCERN - A point, matter, or question raised by management that must be addressed in the planning process.

COVER - Vegetation used by wildlife for protection from predators, to ameliorate conditions of weather, or in which to reproduce.

CULTURAL RESOURCES - Physical remains of districts, sites, structures, buildings, networks, or objects used by humans in the past. They may be historic, prehistoric, archaeological, or architectural in nature. Cultural resources are land based and are nonrenewable.

D

DATA - Any recorded measurements, facts, evidence, or observations reduced to written, graphical, tabular, or computer forms.

DECISION CRITERIA - Essentially the rules or standards used to evaluate alternatives. They are measurements or indicators that are designed to assist a decisionmaker in identifying a preferred choice from an array of possible alternatives.

DESIGNATED CORRIDOR - Both the wild and scenic corridor and the scenic waterway, including all areas that are part of either designation.

DESIRED FUTURE CONDITION - A vision of the desired future state of a specific area. Desired future condition gives managers goals for the area, but recognizes the dynamic state of the ecosystem, instead of listing future numerical outputs as goals.

DEVELOPED RECREATION - Recreation that requires facilities that, in turn, result in concentrated use of an area. Examples of recreation areas are campgrounds and ski areas; facilities in these areas might include roads, parking lots, picnic tables, toilets, drinking water, ski lifts, and buildings.

DISPERSED CAMPSITES - Campsites outside campgrounds, on National Forest or BLM land.

DISPERSED RECREATION - A general term referring to recreation use outside a developed recreation site; this includes activities such as scenic driving, hunting, backpacking, and recreation in primitive environments.

DIVERSITY - The distribution and abundance of different plant and animal communities and species within the area.

E

EARLY SERAL - Ecological status that corresponds to 0 to 25 percent of the plant composition found in the potential natural community. Synonymous with poor range condition.

ECOLOGICAL POTENTIAL - The ecological potential and the potential natural community (PNC) is the biotic community that would become established if all successional sequences were completed without interference by man under the present environmental conditions. It includes the total plant community that is best adapted to the unique combination of environmental factors and is in dynamic equilibrium with the environment. Such natural disturbances as drought, wild fires, grazing by native fauna, and insects are inherent in the development of any natural plant community. Plant communities that are protected from these natural influences for long periods do not always typify the PNC.

ECOLOGICAL STATUS - Four classes of successional stages (or range condition) used to express the degree to which the composition of the present plant community reflects that of climax. The four classes (followed by the percentage of plant community that is climax for the site) are: *Potential, Natural Community, 76-100; Late seral, 51-75; Mid-seral, 25-50; Early seral 0-25.*

ECOSYSTEM - The interacting system of a biological community and its nonliving environment.

EFFECTS - Environmental consequences as a result of a proposed action. Included are direct effects, which are caused by the action and occur at the same time and place, and indirect effects, which are caused by the action and are later in time or further removed in distance, but which are still reasonably foreseeable. Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems. Effects and impacts as used in the FEIS are synonymous. Effects include ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic quality, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative. Effects may also include those resulting from actions that may have both beneficial and detrimental effects, even if on balance the agency believes that the effects will be beneficial (40 CFR 1508.8).

ENDANGERED SPECIES - Any species of animal or plant that is in danger of extinction throughout all or a significant portion of its range. Plant or animal species identified by the Secretary of the Interior as endangered in accordance with the 1973 Endangered Species Act.

ENHANCE - To improve, reinforce, enrich or strengthen the existing condition, value, or beauty of a resource.

ENVIRONMENT - The sum of all external conditions and influence affecting the life, development, and survival of an organism.

ENVIRONMENTAL ANALYSIS - An analysis of alternative actions and their predictable short- and long-term environmental effects, incorporating the physical, biological, economic, social, and environmental design arts and their interactions.

ENVIRONMENTAL ASSESSMENT (EA) - A concise public document required by the regulations implementing the National Environmental Policy Act.

EROSION - The processes whereby earthy or rocky material is worn away, loosened, dissolved and removed from any part of the earth's surface.

EXCELLENT RIPARIAN CONDITIONS - An extremely shady and brushy riparian condition with an abundance of tall overstory conifer trees and shorter hardwoods of alder, willow and aspen will be present; the site has the potential to produce conifer and/or hardwood species. Gentle bank slopes, high plant densities, thick root masses, embedded angular boulders and old logs characterize these areas. Channel scouring will be minimized with deposition replaced by mossy aquatic growth on assorted sizes of tightly packed rocks.

F

FEDERAL LAND POLICY AND MANAGEMENT ACT OF 1976 (FLPMA) - Public Law 94-579. October 21, 1976, often referred to as the BLM's "Organic Act", which provides the majority of the BLM's legislated authority, direction, policy, and basic management guidance.

FEDERAL LANDS - Any land or interest in land owned by the United States regardless of how or when the United States obtained ownership or which Federal agency administers such lands. This includes BLM and Forest Service land.

FINDING OF NO SIGNIFICANT IMPACT (FONSI) - Required by NEPA when a Federal agency prepares an environmental assessment; documents the reasons why the impacts of the proposed action are not significant, and therefore, the agency is not preparing an environmental impact statement.

FISCAL YEAR (FY) - October 1 to September 30.

FORAGE (LIVESTOCK) - All grass and grass-like plants.

FORAGE (WILDLIFE) - All browse and herbaceous food that is available to wildlife for grazing.

FOREGROUND - A term used in scenic management to describe the stand of trees immediately adjacent to a high-value scenic area, recreation facility, or forest highway. (See "Background" or "Middleground.")

FOREST PLAN - The National Forest Land and Resource Management Plan (Forest Plan) guides all natural resource management activities and establishes management standards and guidelines for the Forest. It describes resource management practices, levels of resource production and management, and the availability and suitability of lands for resource management. It is prepared under the implementing regulations and requirements of NFMA.

FUELS - Anything that will burn. Usually live and dead woody vegetation (e.g., grass, shrubs, trees).

FUELS TREATMENT - Any manipulation or removal of fuels to reduce the likelihood of ignition and/or to lessen potential damage and resistance to control (e.g. logging, chipping, crushing, piling, and burning).

FULL SUPPRESSION - Aggressive fire suppression actions to extinguish a fire at the smallest acceptable size. All work and activities associated with fire-extinguishing operations beginning with discovery and continuing until the fire is completely extinguished.

G

GOAL - A concise statement that describes a desired condition to be achieved sometime in the future. It is normally expressed in broad, general terms and is timeless in that it has no specific date by which it is to be completed. Goal statements form the principal basis from which objectives are developed.

GRAZING - Consumption of range or pasture forage by animals.

GRAZING SEASON - 1. A period of grazing to obtain optimum use of the forage resource. 2. On public lands an established period for which grazing permits are issued.

GROUND COVER - Vegetation, mulch, litter, rock, etc.

GUIDELINE - An indication or outline of policy or conduct that is not a mandatory requirement (as opposed to a standard, which is mandatory).

H

HABITAT - The sum total of environmental conditions of a specific place occupied by a wildlife or plant species or a population of such species.

HERBACEOUS - Having little or no woody tissue and persisting usually for a single growing season.

HISTORIC - Refers to the period of time for which there are written records (after European contact). In Region 6, the historic era begins at roughly 1800 A.D., with the first explorers who kept journals.

HYDROLOGIC - Pertaining to the quantity, quality, and timing of water yield from forested lands.

I

IMPROVED ROAD - A constructed or maintained vehicle way for the use of highway-type vehicles having more than two wheels.

INTERDISCIPLINARY TEAM - A group of individuals with different training assembled to solve a problem or perform a task.

INTERPRETATION - Educational activity which aims to reveal meaning and relationships of the natural and cultural environment through first-hand experience.

ISSUE - A point, matter, or question of public discussion or interest to be addressed or decided through the planning process.

J

K

L

LAND EXCHANGE - The conveyance of non-Federal land or interest in the land to the United States in exchange for either National Forest System land, BLM land, or interest in the land.

LARGE WOODY DEBRIS (LWD) - Dead woody material greater than 16 inches, on the ground or in a stream or river; may consist of logs, trees, or parts of trees. Large woody debris contributes to long-term site productivity and health in several ways: it supplies nutrients to the soil, supports symbiotic fungi that are beneficial to conifers, and provides habitat for beneficial rodents and insects.

LIMITS OF ACCEPTABLE CHANGE (LAC) - A concept for managing change in a natural area, based on the premise that ecological and social change will occur as a result of natural and human factors. With the LAC concept, management's goal is to keep the character and amount of change that results from human factors within acceptable levels that are consistent with objectives for the area.

LOW STANDARD TRAIL - A specific reference to system trail development in the North Fork Crooked River Scenic Corridor Management Area (MA-F24). The term is intended to describe a narrower than standard tread width (less than 12"), with no bridges (crossings will remain natural fords).

M

MACROINVERTEBRATE - Usually used to describe the group of visible animals which do not have backbones. This group which includes insects, mollusks, crustaceans, and worms live part or all of their lives in river systems or lakes.

MANAGED STAND - A stand of trees in which stocking level control is applied to achieve maximum growth.

MANAGEMENT DIRECTION - A statement of multiple-use and other goals and objectives, the associated management prescriptions, and standards and guidelines for attaining them.

MANAGEMENT PLAN - A plan guiding overall management of an area administered by a Federal or State agency; plan usually includes objectives, goals, standards and guidelines, management actions, and monitoring plans.

MANAGEMENT PRESCRIPTION - Management practices selected and scheduled for application on a specific area to attain multiple-use and other goals and objectives.

MECHANICAL SUPPRESSION - The utilization of mechanical equipment to suppress a fire or to stop fire progress. Earth moving equipment may be utilized as well as motorized vehicles with water carrying capacity and aircraft.

MIDDLEGROUND - The visible terrain beyond the foreground where individual trees are still visible, but do not stand out distinctly from the stand. (See "Foreground" and "Background.")

MITIGATION - Steps taken to avoid or minimize negative environmental impacts. Mitigation can include: avoiding the impact by not taking a certain action; minimizing impacts by limiting the degree or magnitude of the action; rectifying the impact by repairing or restoring the affected environment; reducing the impact by protective steps required with the action; and, compensating for the impact by replacing or providing substitute resources.

MIXED CONIFER (MC) - A stand of coniferous trees with a mixture of species. Ponderosa pine will usually make up 25 percent to 75 percent of the species composition.

MODIFICATION - See "Scenic Quality Objectives."

MONITORING - A process of collecting significant data from defined sources to identify departures or deviations from expected plan outputs.

MULTIPLE USE - The management of all the various renewable surface resources of Federal land so that they are utilized in the combination that will best meet the needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; that some lands will be used for less than all of the resources; and harmonious and coordinated management of the various resources, each with the other, without impairment of the productivity of the land, with consideration being given to the relative values of the various resources, and not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output.

N

NATIONAL ENVIRONMENTAL POLICY ACT OF 1969 (NEPA) - An act declaring a National policy to encourage productive harmony between man and his environment, to promote efforts which will prevent or eliminate damage to the environment and the biosphere and stimulate the health and welfare of man, to enrich the understanding of the ecological systems and natural resources important to the Nation and to establish a Council on Environmental Quality.

NATIONAL WILD AND SCENIC RIVER SYSTEM - Rivers with outstanding scenic, recreational, geological, fish and wildlife, historic, cultural, or other similar values designed by Congress under the Wild and Scenic Rivers Act for preservation of their free-flowing condition.

O

OBJECTIVE - A concise, time-specific statement of measurable planned results that respond to pre-established goals. An objective forms the basis for further planning to define the precise steps to be taken and the resources to be used in achieving identified goals.

OLD GROWTH STAND - Timber stands with the following characteristics: large mature and over-mature trees in the overstory, large standing dead trees (snags), dead and decaying logs on the ground, and a multi-layered canopy with trees of several age classes. To be defined as old growth, a timber stand must meet the standards set by Research Note PNW-447 for these characteristics.

(USDA - Forest Service definition) An old-growth stand is defined as any stand of trees 10 acres or greater generally containing the following characteristics: 1) stands contain mature and over-mature trees in the overstory and are well into the mature growth stage; 2) stands will usually contain a multilayered canopy and trees of several age classes; 3) standing dead trees and down material

are present; and 4) evidence of man's activities may be present, but does not significantly alter the other characteristics and would be a subordinate factor in a description of such a stand.

OPERATION AND MAINTENANCE COSTS - Costs associated with operating and maintaining facilities, program management, and support costs associated with management of other resources.

OUTSTANDINGLY REMARKABLE VALUES (ORV) - Term used in the National Wild and Scenic Rivers Act of 1968; to qualify as outstandingly remarkable, a resource value must be an unique, rare, or exemplary feature that is significant at a regional or national level.

P

PARTIAL RETENTION - See "Scenic Quality Objectives."

PEAK FLOW - The highest flow of water attained during a particular flood for a given stream or river.

PERIOD OF USE - The time of livestock grazing on a range area based on type of vegetation or stage of vegetative growth.

PERMIT/LEASES (Grazing) - Under Section 3 of the Taylor Grazing Act, a permit is a document authorizing use of public lands within grazing districts for the purpose of grazing livestock. Under Section 15 of the Taylor Grazing Act, a lease is a document authorizing livestock grazing use of public lands outside grazing districts.

PLANNING PERIOD - Generally one decade. The time interval within the planning horizon that is used to show incremental changes to yields, costs, effects, and benefits.

PLANT COMPOSITION - The proportions of various plant species annual production in relation to the total annual production of all plants on a given area.

PLANT SUCCESSION - The process of vegetative development whereby an area becomes successively occupied by different plant communities of higher ecological orders.

PREHISTORIC - Relating to the period of time before written records (prior to European contact). In Region 6, before 1800 A.D., or before the advent of written records.

PRESCRIBED BURNING - Use of fire in forest management for hazard reduction and vegetative manipulation.

PRESCRIBED FIRE - A fire burning within prescription, resulting from planned or unplanned ignition. A prescription is a written statement defining objectives to be attained as well as temperature, humidity, wind direction, wind speed, fuel moisture content, and soil moisture under which the fire will be allowed to burn, generally expressed as acceptable ranges of the various indices, and the limit of the geographic area to be covered.

PRESERVATION - See "Scenic Quality Objectives."

PRIMITIVE ROADS - Roads constructed with no regard for grade control or designed drainage, sometimes by merely repeated driving over an area. These roads are single lane, usually with native surfacing and sometimes passable with 4-wheel drive vehicles only, especially in wet weather.

PUBLIC ISSUE - A subject or question of widespread public interest relating to management of National Forest System or BLM lands.

PUBLIC PARTICIPATION - Meetings, conferences, seminars, workshops, tours, written comments, responses to survey questionnaires, and similar activities designed and held to obtain comments from the public about Forest Service and BLM planning.

RANGE ALLOTMENT - A designated area available for livestock grazing upon which a specified number, kind of livestock and season of use may be grazed under a term grazing permit. The basic land unit used to facilitate management of the range resource on National Forest System, associated lands administered by the Forest Service, and BLM lands.

RANGE CONDITION (USFS) - The state or health of the range vegetation and soil to produce a stable biotic community based on the composition, density, and vigor of the vegetation and the physical characteristics of the soil. Condition is expressed as satisfactory or unsatisfactory.

RANGE IMPROVEMENT - Any structure or nonstructural improvement to facilitate management of range-lands or livestock.

RANGELAND - Land where the vegetation is predominantly grasses, grass-like plants, forbs, or shrubs suitable for livestock grazing and browsing.

RANGE MANAGEMENT - The art and science of planning and directing range use to obtain sustained maximum animal production, consistent with perpetuation of the natural resource.

RAPTOR - Bird of prey with sharp talons and strongly curved beaks, e.g. hawks, owls, vultures, eagles.

RECREATION CAPACITY - The number of people that can take advantage of the supply of a recreation opportunity during an established use period without substantially diminishing the quality of the recreation experience of the biophysical resources.

RECREATION OPPORTUNITY - Those outdoor recreation activities which offer satisfaction in a particular physical, social, and management setting in the EA areas; these activities are primarily hunting, fishing, wildlife viewing, photography, boating, and camping.

RECREATION OPPORTUNITY SPECTRUM (ROS) - Land delineations that identify a variety of recreation experience opportunities categorized into six classes on a continuum from primitive to urban. Each class is defined in terms of the degree to which it satisfies certain recreation experience needs, based on the extent to which the natural environment has been modified, the type of facilities provided, the degree of outdoor skills needed to enjoy the area, and the relative density of recreation use. The six classes are:

1. *Primitive* - Area is characterized by an essentially unmodified natural environment of fairly large size. Interaction between users is very low and evidence of other users is minimal. The area is managed to be essentially free from evidence of human-induced restrictions and controls. Motorized use within the area is not permitted.
2. *Semiprimitive Nonmotorized (SPNM)* - Area is characterized by a predominantly natural or natural-appearing environment of moderate to large size. Interaction between users is low, but there is often evidence of other uses. The area is managed in such a way that minimum on-site controls and restrictions may be present, but would be subtle. Motorized recreation use is not permitted, but local roads used for other resource management activities may be present on a limited basis. Use of such roads is restricted to minimize impacts on recreational experience opportunities.
3. *Semiprimitive Motorized (SPM)* - Area is characterized by a predominantly natural or natural-appearing environment of moderate to large size. Concentration of users is low, but there is often evidence of other users. The area is managed in such a way that minimum on-site controls and restrictions may be present, but would be subtle. Motorized recreation use of local primitive or collector roads with predominantly natural surfaces and trails suitable for motor bikes is permitted.
4. *Roaded Natural (RN)* - Area is characterized by predominantly natural-appearing environments with moderate evidence of the sights and sounds of man. Such evidence usually

harmonizes with the natural environment. Interaction between users may be moderate to high, with evidence of other users prevalent. Resource modification and utilization practices are evident, but harmonize with the natural environment. Conventional motorized use is allowed and incorporated into construction standards and design of facilities.

5. *Rural (R)* - Area is characterized by a natural environment that has been substantially modified by development of structures, vegetative manipulation, or pastoral agricultural development. Resource modification and utilization practices may be used to enhance specific recreation activities and to maintain vegetative cover and soil. Sights and sounds of humans are readily evident, and the interaction between users is often moderate to high. A considerable number of facilities are designed for use by a large number of people. Facilities are often provided for special activities. Moderate user densities are present away from developed sites. Facilities for intensified motorized use and parking are available.
6. *Urban* - Area is characterized by a substantially urbanized environment, although the background may have natural-appearing elements. Renewable resource modification and utilization practices are often used to enhance specific recreation activities. Vegetative cover is often exotic and manicured. Sights and sounds of humans are predominant on site. Large numbers of users can be expected both on site and in nearby areas. Facilities for highly intensified motor use and parking are available with forms of mass transit often available to carry people throughout the site.

REHABILITATION - Actions taken to protect or enhance site productivity, water quality, or other values for a short period of time.

RESEARCH NATURAL AREAS (RNA's) - An area set aside by the BLM or Forest Service to preserve a representative sample of an ecological community; primarily for scientific and educational purposes. Commercial exploitation is not allowed and general public use is discouraged.

RESIDENT FISH - Fish species that complete their entire life cycle in freshwater; non-anadromous fish; an example is the rainbow trout.

RESOURCE - An aspect of human environment which renders possible or facilitates the satisfaction of human wants and the attainment of social objectives.

RESOURCE ASSESSMENT - An evaluation of the resources and values associated with a wild and scenic river and the river corridor; the evaluation determines the level of significance of river-related values.

RESOURCE VALUES - The tangible and intangible worth of forest resources.

RESTORATION - The long-term placement of land back into its natural condition or state of productivity.

RESTRICTED - Some limitations on what would otherwise be the norm or acceptable would be set. In the standards and guidelines where the term is used in a number of places, the limitations are spelled out.

RETENTION - A scenic quality objective which means human activities are not evident to the casual visitor.

REVEGETATION - The re-establishment and development of a plant cover. This may take place naturally through the reproductive processes of the existing flora or artificially through the direct action of man - reforestation or range reseeding.

RIPARIAN AREAS - The riparian ecosystem (area) is that land, next to water, where plants that are dependent on a perpetual source of water occur. Riparian sites include fluvial surfaces such as streambanks, active channel shelves, active floodplains, and overflow channels. Some Class III streams and all of the Class IV streams, and all lakes, springs, bogs, wet meadows and floodplains have not been included in the Riparian Management Areas (MA-F15, MA-G9). Although these stream courses may include a fair number of miles, the actual acreage involved is not thought to be significant. Many of the Class IV stream courses do not

support riparian vegetation at all because of the short duration of water flow during the year. These areas will be managed in concert with other resources using the Standards and Guidelines and Best Management Practices (BMPs).

ROS - See Recreation Opportunity Spectrum.

S

SALVAGE HARVEST - Removal of dead or dying trees resulting from insect and disease epidemics or wildfire.

SCENIC QUALITY - The degree of harmony, contrast and variety within a landscape.

SCENIC QUALITY OBJECTIVES - Categories of acceptable landscape alteration measured in degrees of deviation from the natural-appearing landscape.

1. *Preservation* - Ecological change only.
2. *Retention* - Human activities are not evident to the casual visitor.
3. *Partial Retention* - Human activity may be evident, but must remain subordinate to the characteristic landscape.
4. *Modification* - Human activity may dominate the characteristic landscape, but must, at the same time, follow naturally established form, line, color, and texture. It should appear as a natural occurrence when viewed in foreground or middleground.
5. *Maximum Modification* - Human activity may dominate the characteristic landscape, but should appear as a natural occurrence when viewed as background.

SCENIC RESOURCE - The composite of basic terrain, geologic features, water features, vegetative patterns, and land-use effects that typify a land unit and influence the visual appeal the unit may have for visitors.

SCOPING - Determination of the significant issues to be addressed in an EIS.

SEASONAL (Season long) GRAZING - Grazing use throughout a specific season.

SEDIMENT - Solid material, both mineral and organic, that is in suspension, is being transported, or has been moved from its site of origin by air, water, gravity, or ice and has come to rest on the earth's surface either above or below sea level.

SENSITIVE SPECIES - Plant or animal species which are susceptible or vulnerable to activity impacts or habitat alterations. Those species that are recognized by the BLM Oregon State Director or the Regional Forester as needing special management to prevent placement on Federal or State lists. Species not yet officially listed, but which are undergoing a status review or are proposed for listing according to a *Federal Register* Notice published by the Secretary of the Interior or Secretary of Commerce, or according to comparable States' documents published by State Officials. (Reference BLM Instruction Memorandum WO 80-722.)

SERIAL - A plant and animal community which is transitional in stage of succession, being either short- or long-term. If left alone, the seral stage will pass, and another plant and animal community will replace it.

SHRUB - A low woody plant, usually with several stems, that may provide food and/or cover for animals.

SNAG - A nonliving standing tree. The interior of the snag may be sound or rotted.

SOCIOECONOMIC - Pertaining to, or signifying the combination or interaction of, social and economic factors.

SOIL EROSION - The detachment and movement of soil from the land surface by wind, water, or gravity.

SPECIAL STATUS (plants) - "Special Status Species" (BLM Manual 6840.01 and **IM OR-91-57**): "...species which are proposed for listing, officially listed (T/E), or candidates for listing as threatened or endangered by the Secretary of the Interior under the provisions of the Endangered Species Act (ESA); those listed or proposed for listing by a State in a category implying potential endangerment or extinction; (and) those designated by each State Director as sensitive"; **and those designated by the Bureau as Assessment Species, which are those species not included in the above lists but are on List 2 (Threatened/Endangered in Oregon but more common elsewhere) of the Oregon Natural Heritage Program.**

STANDARD - Performance criteria indicating acceptable norms or specifications that actions must meet. A principle requiring a specific level of attainment, a rule to measure against.

STATE HISTORIC PRESERVATION OFFICER (SHPO) - An official appointed by the Governor of each State to direct implementation of the National Historic Preservation Act of 1966 and subsequent regulations and Executive Order. Responsibilities include: State-wide cultural resource inventory, development of a State Historic Preservation Plan, review of National Register of Historic Places nominations, administration of Federal historic preservation grants, and review of Federal undertakings which might affect cultural resources listed on or eligible for the National Register of Historic Places.

SUCCESSION - The changes in vegetation that take place as a plant community evolves from bare ground to climax.

SUMMER RANGE - A portion of the total range on which big game animals normally find food and cover during summer months.

SUPPRESSION - The action of extinguishing or confining a fire.

T

TERMINUS - The beginning or ending point; in this case, the beginning or ending point of a legally designated corridor, such as the Wild and Scenic North Fork of the Crooked River.

THERMAL COVER - Cover used by animals to lessen the effects of weather; for elk the types of cover are:

Summer Range - A stand of coniferous trees at least 40 feet tall with an average crown closure of 40 percent or more.

Winter Range - A stand of coniferous trees 10 feet or more tall with an average crown closure of 40 percent or more.

THREATENED SPECIES - Any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range and which has been designated in the Federal Register by the Secretary of the Interior as a threatened species.

TIMBER - A general term for the major woody growth of vegetation in a forest area.

TURBIDITY - The relative clarity of the water, which may be affected by material in suspension in the water.

U

UNDERSTORY VEGETATION - Grass, small trees, shrubs, and other plants found beneath the overstory (the trees comprising the forest).

UNIMPEDED RECOVERY - The rate of natural recovery of a particular site to its ecological potential if it were not affected by man's activities; unhindered.

V

VIABLE POPULATION - The number of individuals of a species required to ensure the long-term existence of the species in natural, self-sustaining populations adequately distributed throughout their region.

VIEWSHED - The total landscape seen or potentially seen from all or a logical part of a travel route, use area, or water body.

W

WATER QUALITY - The chemical, physical, and biological characteristics of water with respect to its suitability for a particular use.

WATERSHED - The area that contributes water to a drainage or stream.

WETLANDS - Areas that are inundated by surface water or groundwater with a frequency sufficient to support, and under normal circumstances does or would support, a prevalence of vegetation or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction (Executive Order 11990).

WILD AND SCENIC RIVERS - Those rivers or sections of rivers designated as such by congressional actions under the 1968 Wild and Scenic Rivers Act, as wild, scenic, or recreational by an act of the Legislature of the State or States through which they flow. Wild and scenic rivers may be classified and administered under one or more of the following categories:

1. *Wild River Areas* - Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.
2. *Scenic River Areas* - Those rivers or sections of rivers that are free of impoundments, with watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.
3. *Recreational River Areas* - Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

WILDERNESS - Areas designated by congressional action under the 1964 Wilderness Act. Wilderness is defined as undeveloped Federal land retaining its primeval character and influence without permanent improvements or human habitation. Wilderness areas are protected and managed to preserve their natural conditions, which generally appear to have been affected primarily by the forces of nature, with the imprint of human activity substantially unnoticeable; have outstanding opportunities for solitude or for a primitive and confined type of recreation; include at least 5,000 acres or are of sufficient size to make practical their preservation, enjoyment, and use in an unimpaired condition; and may contain features of scientific, educational, scenic, or historical value as well as ecologic and geologic interest.

WILDERNESS ACT - Establishes a National Wilderness Preservation System to be composed of Federally-owned areas designated by Congress, administered for use and enjoyment as Wilderness, the preservation of their wilderness character, and for the gathering and dissemination of information regarding their use and enjoyment as Wilderness.

WILDERNESS STUDY AREA (WSA) - An area determined to have wilderness characteristics. Study areas will be subject to interdisciplinary analysis and public comment to determine wilderness suitability. Suitable areas will be recommended to the President and Congress for wilderness designation.

WILDFIRE - Any wildland fire that is not a prescribed fire. All wildfires require suppression.

WILDLIFE - All nondomesticated mammals, birds, reptiles, and amphibians living in a natural environment, including both game species and nongame species. Animals or their progeny, which once were domesticated but escaped captivity and are running wild (i.e., feral animals), such as horses, burros, and hogs, are not considered wildlife.

WILDLIFE HABITAT DIVERSITY - The distribution and abundance of different plant and animal communities and species within a specific area.

WINTER RANGE - A range, usually at lower elevation, used by big game during the winter months; usually smaller and better-defined than summer ranges.

WITHDRAWAL - The withholding of an area of Federal land from settlement, sale, location, or entry, under some or all of the general land laws for the purpose of limiting activities under those laws in order to maintain other public values in the area.

Y

Z

APPENDIX B

Memorandum of Understanding



"...in quarter-mile letters it had taken
centuries to form, water - my favorite element
asked in the only language I could read,
WHY."

≈ David J. Duncan ≈

MEMORANDUM OF UNDERSTANDING
BETWEEN THE
BUREAU OF LAND MANAGEMENT, PRINEVILLE DISTRICT
AND
UNITED STATES FOREST SERVICE, OCHOCO NATIONAL FOREST

I. Purpose

This agreement provides procedures to: (a) facilitate preparation of joint FS-BLM river plans and environmental studies on contiguous rivers within their areas of jurisdiction included in the Oregon Omnibus Wild- and Scenic Rivers Act of 1988 (PL 100-557) and (b) further FS-BLM cooperation in meeting the requirements of the Wild and Scenic Rivers Act, National Environmental Policy Act (NEPA), National Forest Management Act (NFMA) and Federal Land Policy and Management Act (FLPMA).

II. Authority

The Forest Supervisor, Ochoco National Forest (USFS) has the delegated authority to enter into this agreement by Sec. 3, P.L. 90-542 and amendments thereto; and the District Manager, Prineville District (BLM) has the delegated authority under the Federal Land Policy and Management Act P.L. 94-579 and amendments thereto. Other authorities include:

- A. National Environmental Policy Act (42 U.S.C. 4321 et. seq.)
- B. Wild and Scenic Rivers Act (16 U.S.C. 1271-1287)
- C. Economy Act (31 U.S.C. 686, 686b)
- D. E.O. 11514
- E. 40 CFR 1500-1508
- F. 36 CFR 219, Subpart A

III. Definitions

- A. Management Planning: The establishment of river boundaries and the development of a detailed management plan and environmental studies required by the Wild and Scenic Rivers Act.
- B. Lead Agency: The Federal agency that will provide principle leadership and oversight in ensuring that a joint management plan is developed and reported.
- C. Cooperating Agency: The agency that will support the lead agency in planning for and the execution of management plan, environmental studies and public participation.

IV. Responsibilities

- A. The Bureau of Land Management, Prineville District, will serve as the lead agency and the USFS, Ochoco National Forest as the cooperating agency.
- B. The two agencies will collaborate in establishing boundaries and preparing management plans and environmental studies for the following rivers designated under PL 100-557:

1. North Fork Crooked, Oregon - The 32.3-mile segment from its source at Williams Prairie to one mile from its confluence with the Crooked River in the following classes:
 - a. the 3-mile segment from its source at Williams Prairie to the Upper End of Big Summit Prairie as a recreational river; to be administered by the Secretary of Agriculture;
 - b. the 3.7-mile segment from the Lower End of Big Summit Prairie to the confluence with Deep Creek as a recreational river; to be administered by the Secretary of Agriculture;
 - c. the 8-mile segment from the confluence with Deep Creek to the private land boundary one-half mile from Lane Dog Creek as a scenic river; to be administered by the Secretary of Agriculture;
 - d. the 1.5-mile segment from the private land boundary to Upper Falls as a scenic river; to be administered by the Secretary of the Interior;
 - e. the 11.1-mile segment from Upper Falls to Committee Creek as a wild river; to be administered by the Secretary of the Interior; and
 - f. the 5-mile segment from Committee Creek to one mile from its confluence with the Crooked River as a recreational river; to be administered by the Secretary of the Interior.
 2. South Fork John Day, Oregon - the 47-mile segment from the Malheur National Forest to Smokey Creek as a recreational river to be administered by the Secretary of the Interior. This segment includes Ochoco National Forest land adjacent to Black Canyon Creek and South Fork of the John Day River.
 3. Crooked, Oregon - the 9.3-mile segment from the National Grassland boundary to Lake Billy Chinook, one mile west of Highway 97, as a recreational river to be administered by the Secretary of the Interior.
 4. Deschutes, Oregon - the 19-mile segment from Oden Falls to the upper end of Lake Billy Chinook as a scenic river; to be administered by the Secretary of the Interior.
- C. Develop joint program strategies and pool staffing and funding to accomplish work within legislated schedules. Contributions in the form of personnel or funding are based on percent of each agency's land included within a given river segment.
- D. Develop and implement a joint public participation plan.

V. Administration/Agreement

It is agreed and understood by and between USFS and BLM that:

- A. As the need arises, amendments may be proposed by either agency and shall become effective on approval by all parties.
- B. It is recognized that parties to this agreement have responsibilities under statute or otherwise which cannot be waived or abrogated. This agreement does not affect such nondiscretionary mandates.
- C. Nothing in this agreement shall commit the parties or their agencies to the expenditure of funds not authorized by law.
- D. Either party may terminate this agreement by providing 60 days' written notice to the other party. This agreement will remain in force until work is completed.
- E. No member of, or delegate to, Congress, or resident commission, shall be admitted to any share or part of this agreement or to any benefit that may arise therefrom.
- F. This agreement shall be effective upon execution of both parties hereto.

VI. Effective Date: This agreement will become effective on the date of the last signature, and will remain in force unless and until terminated by Ochoco Forest Supervisor or Prineville District Manager.

Terry D. Solberg
Forest Supervisor
Ochoco National Forest, USFS

Ronald L. Smith 5/31/89
District Manager (Acting)
Prineville District, BLM

APPENDIX C

List of Preparers



"The quiet waters deceive the eye and
suggest to the beholder the thought
he is looking into profound depths."

≈ John Westly Powell ≈

List of Preparers

<i>Name/Title</i>	<i>Agency</i>	<i>Responsibilities</i>
Susan Kocis Wild and Scenic River Planner	Forest Service	ID Team Leader/Forest Service coordinator
SuZan Meiners Outdoor Recreation Planner	BLM	ID Team Leader/BLM coordinator
Matt Crossett Recreation/Law En- forcement	Forest Service	ID Team member/Recreation and law enforcement
Rick Demmer Watershed Specialist	BLM	ID Team member/Water quality, soils, and riparian habitat
Mike Dettori Range Conservationist	Forest Service	ID Team member/Range conditions
Dean Grover Fisheries Biologist	Forest Service	ID Team member/Fisheries and riparian habitat
Brad Keller Wildlife Biologist	BLM	ID Team member/Wildlife and vegetation
Roy A. Pearl Natural Resource Spe- cialist	BLM	ID Team member/Wilderness, recreation, and access
Alan Redman Landscape Architect	Forest Service	ID Team member/Landscape management
David Young Fisheries Biologist	BLM	ID Team member/Fisheries and riparian habitat
Don Zalunardo Range Conservationist	BLM	ID Team member/Range conditions
Jay Alway Land Surveyor	Forest Service	Boundaries and property lines
Bruce Anderson Hydrologist	Forest Service	Water quality and quantity
Paul Claeysens Archeologist	Forest Service	Cultural resources and historical analysis

Lisa Croft Botanist	Forest Service	Threatened, endangered, and sensitive plants
Paul Cuddy Forest Planner/Analyst	Forest Service	Socio-economics
Brian Cunninghame Natural Resource Specialist	BLM	Technical review
Art Currier	Forest Service	Technical NEPA review
Jim David Soil Scientist	Forest Service	Soils
Dennis Davis Geologist	BLM	Geology/Energy and minerals
Ron Halvorson Natural Resource Specialist	BLM	Botanical resources and NEPA review
Lorri Heath Assistant Fire Staff	Forest Service	Fire management
Rodd Kubitza	Forest Service	Access management
Ron Lane Realty Specialist	BLM	Lands
Steve Lent Fire Management Officer	BLM	Fire management
Mary Maercklein Archeologist	Forest Service	Cultural resources
Jim Martin Paleontologist	BLM	Paleontological Resources
Rebecca Puddy Computer Assistant	Forest Service	Writer/Editor
Larry Thomas Soils Scientist	BLM	Soils/Hydrology
Roy L. Tidwell Recreation Technician	BLM	Socio-economics
Deborah Tout Minerals Specialist	Forest Service	Lands and Minerals coordinator

Syd Williamson Forester	BLM	Forestry
Dan Wood Supervisory Outdoor Recreation Planner	BLM	Technical Review
Dave Zalunardo Wildlife Biologist	Forest Service	Wildlife and vegetation
John K. Zancanella Archaeologist	BLM	Cultural/Historical specialist and research

APPENDIX D

Response to Public Comments



"When protected, rivers serve as visible symbols of the care we take as temporary inhabitants and fulltime stewards of a living, profoundly beautiful heritage of nature."

≈ W. Kent Olson ≈

SUMMARY OF PUBLIC COMMENTS
TO NORTH FORK CROOKED RIVER EA/DRAFT PLAN

The North Fork Crooked River Environmental Assessment and Draft Management Plan was sent to the public for review on September 21, 1992. The 30 day comment period was extended to 60 days due to public request. The final comment period ended November 23, 1992. Twenty-seven written responses, 3 telephone calls, and five personal visits were received during this period. Comments were received from private landowners, state and local agencies and organizations, the Confederated Tribes of the Warm Springs Reservation of Oregon, government agencies, and private citizens. Both the Forest Service and BLM considered all comments and many changes were made to the Final River Management Plan based on these public comments. This appendix summarizes how these comments were incorporated into the final decisions.

REDUCE IMPACTS OF RECREATION (TRAILS, CAMPGROUNDS, MOTORIZED USE)

A. ROS/ACCESS

COMMENTS: Some respondents wanted either Segment 4, or the entire river corridor, to be managed for primitive, non-motorized recreation. They also wanted the agencies to clarify how motorized restrictions would be enforced and monitored. Some concern was expressed that riparian recovery objectives would not be met if recreation use was increased by adding trails, facilities, and increased advertisement.

RESPONSE: *The North Fork offers a wide range of recreation opportunities. For example, Segment 2 best lends itself to Roaded Natural management due to the paved road that parallels the river and the segment's "Recreational" classification. On the other hand, Segment 5, with its "Wild" classification, is best managed as Primitive because it falls mostly within a Wilderness Study Area and is difficult to access. Segment 4, with its "Scenic" classification, can be accessed by a dirt road and is mostly private land. The majority of the federal land in Segment 4 is unroaded and will continue to be managed as such, allowing public motorized access only on the limited identified system roads with a 20% grade or less.*

The effect of implementing the Plan will be to further limit motorized access in all segments in order to protect Outstandingly Remarkable Values (ORVs) such as riparian areas. Motorized restrictions will be enforced and monitored through random patrols (see NFCR-11, 14, 15, 25). Some literature and signing is planned but its purpose will be to reduce recreational impacts through education and not to attract more use to the area. For example, roads that are closed will be signed on the ground as well as displayed on maps. Recreation use is expected to increase as a result of river designation and improved facilities, however this use is expected to remain below site capacity.

TRAILS

COMMENTS: Some were not in favor of trail development in Segments 3, 4 and 5 and others wanted to eliminate existing trails in Segment 5. It was requested that formal trails be developed below Deep Creek.

RESPONSE: *The preferred alternative did not propose developed trails in Segments 1, 4, 5 or 6. As a result of concerns about the riparian impacts, the proposal for a primitive, non-motorized trail in Segment 3 has been modified. The Interdisciplinary Team felt that the most appropriate trail would begin at the end of Segment 2 in Deep Creek Campground, travel for some distance into Segment 3, and loop back to the campground. This trail will enhance recreation opportunities at Deep Creek Campground, provide some barrier-free access to the river, and minimize impacts from many user developed trails by encouraging use on a trail designed to accommodate wear and tear. Final location of the trail will depend on site specific analysis. Some user developed trails in Segment 5 could be closed, maintained or altered if resource damage occurs.*

Trails developed by casual users, cattle and big game will be monitored for resource impacts (see NFCR-16, 25).

FACILITIES

COMMENTS: Some felt that the existing camping opportunities meet the present demand and therefore no additional facilities were needed. Some did not want resources protected by means of facility development and stressed that all resources should be considered when making recreation-related decisions. Providing barrier free access to this river for recreation was also questioned.

RESPONSE: The preferred alternative did not propose additional campgrounds. It did propose to reconstruct the existing Deep Creek Campground, providing barrier-free access, and public health and safety. Barrier-free access must be considered by law (The Rehabilitation Act of 1973 and as amended in 1978). The scenic viewpoints, part of the trail, and the campground will be barrier-free and accommodate wheelchairs (NFCR-9, 10). Other segments of the river may be accessible to some people with physical challenges but may not accommodate wheelchairs. All projects proposed will require site specific analysis to determine effects on other river resources (see Chapter III). Should a site receive resource damage due to heavy visitation, a variety of options, including but not limited to site improvement, will be considered and the most sensible option that protects the ORVs will be implemented.

SPECIFICS NEEDED CONCERNING AGENCIES/LANDOWNER COOPERATION

COMMENTS: Several people felt that more detail was needed on types, purposes, funding, and restrictions of the cooperative landowner and agency projects that would be encouraged. Some wanted to know if cooperative projects and county zoning would be used to change private land management.

RESPONSE: Cooperation will be encouraged by informing landowners and the County about the various incentive programs available (see NFCR-11, 12). County/federal cooperation will also be achieved by sharing federal land management goals with county planners and adjoining private landowners. Partnerships, challenge cost share and the Governor's Watershed Enhancement Board program will also be pursued with other agencies, public groups, and private citizens with the goal of improving water quality and protecting scenic river values. Coordinated Resource Management Plans and Memorandums of Understanding among agencies would be used as well. Fish screens, funded by the challenge cost share program, could be constructed at irrigation diversions of willing landowners. The Crooked River High School's Crooked River Watershed Cooperative Education Program could also be used for materials and labor to help restore riparian vegetation and watershed conditions. Fencing, from whatever funding was available, would be used to create riparian pastures, improve grazing systems and improve watershed conditions. Cooperative projects must be agreed upon by all parties concerned and therefore no changes in private land management would take place without the consent of all involved.

COMMENTS: Could LCDC Goal 5 be used to protect cultural resources?

RESPONSE: The Land Conservation and Development Commission (LCDC) Goal 5 refers to Oregon's statewide land-use planning goals. These goals are achieved through local comprehensive planning. For further information, contact the Crook County Planning Department.

WSR BOUNDARY/SEGMENT CHANGES NEEDED

COMMENTS: Some respondents did not want private land included within the Wild and Scenic River boundaries and suggestions were made to narrow the boundary to the high water mark where private land exists. Some respondents wished clarification on how boundaries were decided and wanted acreage figures

checked. Some respondents felt that boundaries should be limited to 320 acres or less per river mile or limited to the canyon rims. Others suggested changing segment boundaries between Segments 4 and 5 and between Segments 5 and 6.

RESPONSE: The Omnibus Oregon Wild and Scenic Rivers Act of 1988 and the National Wild and Scenic Rivers Act of 1969 state that boundaries should be established to include outstandingly remarkable river values and not exceed an **average** of 320 acres per river mile. Congressional legislation does not distinguish between public and private lands when defining boundaries. Therefore, boundaries for the North Fork were considered, not on the basis of land ownership, but for inclusion and protection of the ORVs. Boundaries in the preferred alternative were based on foreground views as seen from the river to protect scenic values, and drawn to the nearest easily locatable natural or human-made feature (such as roads) and legally identifiable survey lines. These boundaries were reexamined based on public comment. In order to include higher priority values elsewhere in the river corridor, a small portion of the boundary in Segment 6 was narrowed to the high water mark. (See final boundary map and Decision Notice in the beginning of this document as well as the boundary description in Appendix G).

Segment boundaries were established by Congress in the Act and cannot be changed by the managing agencies. However, due to the level of existing developments in the lower end of Segment 5, BLM feels that moving the division between Segments 5 and 6 upriver to the mouth of Mud Spring would make sense given the nature of "Wild" and "Recreational" classifications. In the event that the Wilderness Study Area becomes Wilderness, the boundary between Wild and Recreational classification should be coordinated with the delineation of the Wilderness boundary. Until such time as Congress makes segment boundary changes, however, the segments will be managed as originally written in the Wild and Scenic River Act. The Wild and Scenic River in Segment 4 will continue to be "officially" administered by the BLM, however, the USFS will manage federal lands within the Forest boundary.

LAND ACQUISITION

COMMENTS: Concern was expressed about the effects of the plan on the county tax base. It was stated that landowners should be compensated if denied the right to use their land. Other comments encouraged agencies to acquire existing private land within the corridor.

RESPONSE: Federal agencies cannot deny private land owners the right to use their own land. In the absence of local or state river protection provisions, the federal government could work with willing landowners to acquire scenic easements, or land. However, these measures would require compensation. Pursuing private land acquisition within the corridor is planned if the opportunity becomes available. In order to minimize adverse impacts on the county tax base, exchanges would be the preferred option for land acquisitions.

HOW WSR AFFECTS PRIVATE LAND/PERMITTEES

COMMENTS: Landowners and permittees were concerned about how the plan affected their ability to access and maintain structures and roads on private and public land, especially in the Wild segment. Some felt that federal agencies should not make suggestions to local zoning plans, even concerning how public lands are to be managed. Concern over the public creating more trespass and liability problems was mentioned. Several people wanted to see the sentence on page 11 of the EA read "land uses and developments on private land will be permitted to continue" (as opposed to "may"). Concerns were expressed over potential conflicts with the Water Resources Department regarding water diversions and measuring device legislation.

RESPONSE: Landowner and permittee access to facilities on private lands and

necessary maintenance of facilities on public lands is guaranteed in the Final Plan (see NFCR-15). In most of Segment 5, the existing Wilderness Study Area's more stringent rules will continue to override any less stringent designations such as the Wild classification. In Wilderness Study Areas, existing roads and structures can be maintained using the least disturbing method. The "Wild" area was classified by Congress. Property values have generally remained stable or have increased as a result of prior Wild and Scenic River designations. Valid water rights and existing dams, diversions and other water projects are not affected by a Wild and Scenic River designation. New water project proposals will be evaluated on their potential to directly or adversely affect river values.

The federal government's role in county planning along Wild and Scenic Rivers is described in the letter to the Crook County Planning Department included in Appendix H. The Wild and Scenic designation does not give the public the right to trespass on private land. It is expected that trespass and liability problems will actually be reduced as a result of this plan since public access will be more limited. Additionally, BLM and USFS plan to use such methods as signing, brochures, and maps to help diminish these problems. The private landowner will be responsible for signing their own property.

No significant negative effects on the local economy, permittees, livestock or timber business were found during the analysis of Environmental Consequences (EA, page 66). Any effects to livestock that may have resulted from the USFS proposed 20% reduction of grazing in riparian zones has been mitigated by eliminating this standard. It is now replaced with a new Standard and Guideline for unimpeded recovery. These changes are not a result of this river plan but of implementation of Ochoco National Forest Standards and Guidelines for riparian zones. On BLM lands, impacts to permittees should be minimal because livestock will be managed through season-of-use and no AUM reductions are proposed. Impacts on timber business from plan implementation on BLM land is nil because commercial forestland has previously been withdrawn. Even if private land is acquired by BLM and commercial forestland withdrawn, impacts will still be negligible.

The sentence in question on page 11 of the EA has been deleted entirely since the EA and Plan sufficiently explains regulation and authorities on private land. The access to and the measuring of water use are not considered to be surface disturbing activities therefore, the Water Resources Department's measuring device legislation would not detract or impair Wild and Scenic River values.

INSUFFICIENT FISH/WILDLIFE INFORMATION

COMMENTS: It was questioned whether a Biological Evaluation had been completed for sensitive species in the area. It was also mentioned that impacts of commodity activities on native fish species viability need to be considered. It was felt that drastic measures were needed to save the native trout from extinction. One group requested that "Inland" be omitted in front of "trout" on page 59 and 69 of the EA and wanted to know who designated the Deschutes River a cold water fishery. Some expressed concern that lichens, mosses, fungi and insects are unaccounted for. Others felt that more frequent monitoring was needed for fish and wildlife habitat. Another questioned whether the biological and physical elements were still in place for reaching fish production potential and wanted to know what the target potential was. It was wondered if, after beaver are reintroduced, there would be restrictions on beaver trapping.

RESPONSE: The Forest Service has completed biological evaluations for plant, animal and fish species on the North Fork. No adverse effects were found if the preferred alternative were implemented. These evaluations are contained in the analysis file at the Ochoco National Forest Supervisor's Office. The BLM conducts biological evaluations, assessments or other reviews to address specific projects or actions. For this plan, however, the BLM evaluation

completed was a complete review of riparian and upland habitats, using historic data to judge the trend in habitat conditions. In these inventories, all wildlife sightings are recorded and compared to habitat conditions, particularly for Threatened, Endangered and Sensitive species such as spotted frogs and redband trout. No specific inventory for Preble's shrew has been conducted for BLM lands. For the most part, management in the BLM segments consists of reducing potentially harmful activities in the river corridor. Any plans of ground disturbing activity would require BLM to consider impacts on sensitive or special status species.

Fish populations are managed by the Oregon Department of Fish and Wildlife. Fish habitat is managed by the BLM and USFS on federal lands. Both the biological and physical elements are in place to meet native trout fish potential, although it may take many years to achieve. The EA has already analyzed the impacts of commodity uses on native fish species in the area (please refer to pg. 53, paragraph 7 of the EA). The trend of riparian vegetation in most of Segment 5 is stable or improved (see riparian description in Appendix F). BLM will focus on improving riparian habitat in the lower end of Segment 5 and on BLM parcels in Segment 6. BLM is also willing to work cooperatively with private landowners in Segment 6 to improve riparian habitat. "Inland" has been omitted. Oregon Department of Fish and Wildlife designated the Deschutes River Basin a cold water fishery.

While lichens, mosses, fungi and insects were not brought up as issues during scoping, BLM and USFS have the responsibility to address the effects of our activities on all special status species. No adverse effects of plan implementation are expected to occur on any special status lichens, mosses, fungi or insects. If future studies and monitoring efforts reveal unforeseen adverse effects on these or other species, mitigation measures will be pursued. In regards to frequency of habitat monitoring, BLM has been measuring water temperature on an ongoing basis and, starting this spring, BLM will also monitor dissolved oxygen, pH level, conductivity, turbidity, and nitrate. A remote sensing study of riparian vegetation will be conducted this spring as well. Beaver populations are the responsibility of the state and there are already state restrictions on beaver trapping. BLM and USFS will work with Oregon Department of Fish and Wildlife to ensure that beaver populations do not exceed carrying capacity.

MINERAL/ENERGY RESOURCES NEED TO BE CONSIDERED IN PLAN

COMMENTS: Oregon Department of Geology and Mines felt that gas and oil potential in the area was high and discussion of it should be included in the economic impacts. They wanted the preferred alternative to accommodate exploration and development of industrial mineral resources as well as gravel, rock and aggregate.

RESPONSE: Mineral and energy exploration and development were not identified as issues during the river management planning process. Development of minerals would follow existing agency management direction. Development of gravel, rock and aggregate beds within the foreground views of the river that would detract from the outstandingly remarkable values would not be permitted. BLM and the USFS are required to provide "reasonable access" for mineral exploration and development. Claimants are required to first file a Notice of Intent. After filing, a Plan of Operations is required for review in order to mitigate disturbances and protect ORVs. Because of the high scenic and recreational values, a restrictive no surface occupancy stipulation for fluid minerals exploration and development will be maintained within the Wild and Scenic River boundary.

MORE DATA NEEDED

COMMENTS: Several respondents felt that more archaeological, paleontological and recreation use data was needed before making final decisions. It was felt that resource managers should continue to protect and enhance river resources

regardless of whether or not more studies are needed.

RESPONSE: Recreation data will continue to be collected from the North Fork as funding allows. A complete archaeological survey of the entire corridor, although desirable, seems prohibitive given current funding levels. However, there will be completion of some form of sample survey for archaeological and traditional use properties within the next ten years to provide better base-line data. Alternatively, working with the Confederated Tribes of the Warm Springs Reservation of Oregon through the proposed Memorandum of Understanding, BLM may be able to develop a similar strategy to accomplish the corridor survey. This seems the most realistic approach to these concerns given the very limited impacts expected to occur.

The majority of the river corridor, geologically speaking, is Columbia River Basalts which are not conducive to the preservation of vertebrate fossils. Only the very lower portions of the corridor (mostly private lands) may contain suitable geologic formations. Formal paleontologic surveys have been conducted in close proximity to this area, and a volunteer geologist conducted an informal survey on the few public parcels in Segment 6. BLM and USFS agree that the need for more studies should not prevent any necessary protection or enhancement of resources.

NAVIGABILITY STATUS NEEDS TO BE DETERMINED

COMMENTS: Some felt that there was not sufficient evidence to qualify the North Fork as a "highway of commerce" while others felt that the navigability status of the North Fork needed to be determined immediately to prevent future devastation caused by removal of riverbed material.

RESPONSE: The designation of a river into the Wild and Scenic River system has no bearing upon the determination of navigability. The BLM and USFS consider the North Fork non-navigable until proven otherwise. The Division of State Lands has determined that there is sufficient evidence to support a claim to navigability and state ownership for the beds and banks of the North Fork at least from the mouth of Deep Creek to the river's confluence. As implied in the EA (page 15), it is often the courts that settle differences of opinion concerning navigability.

NEED ASSURANCES ABOUT TIMELY PLAN IMPLEMENTED

COMMENTS: People wanted actions listed in priority order and a time line developed in order to assure plan implementation and meaningful improvements. Some felt that actions necessary to initiate speedy riparian recovery must be implemented within 5 years.

RESPONSE: Completion periods are listed with the Implementation schedule in Chapter III in order to set action priorities. BLM management policy is to manage riparian habitat for ecological potential. The time line may be constrained by conflicting resource priorities and funding. BLM will continue to work with the Crooked River Watershed Cooperative Education Program to initiate speedy riparian recovery.

RIPARIAN MANAGEMENT/LIVESTOCK CONCERNS

A. GRAZING CONCERNS

COMMENTS: Some respondents expressed their opposition to grazing in a Wild and Scenic River corridor. Another view posed that the effect of livestock on scenic value was totally subjective. Some felt that elimination of grazing in the corridor would have no economic impact since there were vast acreage of nearby federal lands under grazing leases.

RESPONSE: The Wild and Scenic Rivers Act prohibits abrogation of existing rights and privileges (such as grazing). However, to meet State Department of

Water Quality guidelines and improve fish habitat and scenic values, grazing in riparian areas is being modified and reduced (see NFCR-10, 11, 13, 14, 21, 23, 24 and Appendices E and F). Proper livestock grazing can continue simultaneous to maintaining proper ecological status or/and improving riparian vegetation. This is evidenced by the fact that BLM lands in Segment 5 are mostly in a stable or upward trend for riparian vegetation (see riparian discussion in Appendix F). Segments 4 and 6 are mostly private. BLM agrees that livestock and recreation need to be managed in order for riparian regeneration to take place. However, BLM lands within the corridor are mostly in mid to late seral condition and, at this stage, livestock removal would not significantly speed up improvement of riparian vegetation.

B. ARE EXISTING STANDARDS ENOUGH TO PROTECT ORVs?

COMMENTS: There was concern that current grazing plans conflict with the non-degradation and enhancement policy of the Wild and Scenic Rivers Act. There was also concern that the overall dynamics of the area were not being considered when developing utilization standards. Some felt that state/ODFW standards should be implemented for riparian management on both federal and private land. Problems of deferred and spring/summer grazing regimes in riparian systems characterized by woody vegetation were noted. Monitoring thresholds for water quality, riparian condition, and wildlife habitat were thought to be absent or too low to obtain the recommended goals of speedy recovery for degraded areas to 100% of ecological potential and a standard of non-degradation for ORVs.

RESPONSE: Where state standards are in place (such as water quality, forestry practices, etc.), those standards are applicable. Monitoring thresholds have been revisited and revised as necessary (see NFCR-23, 24).

BLM believes that spring grazing and sequential annual rest treatments is the best grazing regime for riparian areas. BLM pastures that are along the river are grazed above the canyon during the summer. However, due to the steep, deeply incised canyon, summer livestock use in the BLM riparian areas is limited. BLM data for Segment 5 show riparian condition to be very good with an upward trend (see riparian discussion in Appendix F). The majority of Segment 6 is private land and is therefore not under agency control. In the isolated public tracts of Segment 6, BLM will work to improve the ecological condition of riparian areas through riparian pastures and season-of-use adjustments. Although BLM uses season-of-use adjustments in riparian areas, a riparian pasture could be created in Segment 5 through fence construction outside the WSA boundary. Change of livestock class and active herding are not necessary on BLM land because most of the parcels are inaccessible, in good condition and season-of-use or riparian pastures will work best for the few areas needing improvements.

The USFS has revised riparian grazing standards in this final plan. The desired future condition of riparian areas and vegetation has been revised. Until such time that the AMP itself can be revised, range conditions not currently in an upward trend will be revised in the annual operation plan. To determine biological potential of riparian areas that need improvement, the USFS will collect data from similar watersheds on the forest until monitoring data on the North Fork is available. Long term objectives will come from monitoring information, exclosure data, and comparative studies. Meanwhile, four out of the five USFS allotments within the corridor are currently working towards improved range and riparian condition. The Big Summit Allotment has been revised to incorporate Wild and Scenic River objectives. The Roba Allotment is currently in revision and will be completed within one year. (See Appendix E for current USFS range conditions and Chapter III for allotment revision schedule).

C. EFFORTS TO IMPROVE RIPARIAN ON PRIVATE LANDS

COMMENTS: It was suggested that BLM exchange scattered parcels in Big Summit

Prairie for the riparian corridor along the North Fork (then fence the corridor to exclude livestock) or negotiate a long-term riparian conservation easement. Some wondered what kind of fencing would be done, if private land would be fenced separately and who would do the fencing.

RESPONSE: BLM's goal is to consolidate isolated and scattered tracts of public land and will consider any land tenure adjustment opportunities that will enhance and improve Wild and Scenic River management. It is BLM's policy to first implement feasible and cost effective grazing management treatments and make appropriate adjustments over time based on resource monitoring studies. Through interdisciplinary team efforts, the BLM has been highly successful in implementing grazing treatments that promote improved upland and riparian conditions. There may be some fence construction on the WSA boundary (some places need gap fences only) to create riparian pastures. Federal funds would most likely be used for this.

D. PLAN NOT SPECIFIC ENOUGH

COMMENTS: It was felt that more information was needed on existing and proposed range improvements, water quality and riparian improvements, condition/trend of riparian areas, pasture arrangement map, and grazing system details. A question arose as to whether or not the existing grazing plan in the RMP would continue to be used. Some wondered what the area is suppose to look like and how long it would take to reach that goal. Others felt that the amount of grazing in the riparian areas of Segments 1 through 3 needs to be known.

RESPONSE: BLM data for Segment 5 show riparian condition to be very good with an upward trend (see riparian discussion in Appendix F). BLM feels that season-of-use and duration of grazing are more important than number of livestock (AUMs) in managing riparian areas. A riparian pasture could be created to further protect the good condition in Segment 5. In the isolated public tracts of Segment 6, BLM will work to improve the ecological condition of riparian areas through season-of-use or livestock exclusion. BLM is also anxious to work cooperatively with willing private landowners in Segment 6 to improve riparian habitat (see comments in this appendix under "Specifics Needed Concerning Agencies/Landowner Cooperation").

The existing grazing plan in the RMP would be used only if the system was meeting River Plan objectives such as in most of Segment 5. Projects scheduled in the BLM's 1988 Allotment Evaluation for the North Fork allotment include reservoir improvement, spring development, including private land in grazing prescription with the agreement of owner, and turning in at the Committee Creek pastures as soon as ground is firm and not supersaturated. The evaluation calls for the riparian area in the Township pasture (lower end of Segment 6) to be grazed between May 1-15 each year and in the fall if water availability and vegetative growth allow. With an "improve" objective in the Wild and Scenic River Plan, Fall use would be eliminated in the Township pasture. The East Committee Creek pasture would be grazed between April 15-30 one year and May 1-15 the other year. Please refer to pasture arrangement maps in the appendix. Please refer to Desired Future Condition (NFCR-8, 9) as to what the area is expected to look like and refer to the Implementation and Monitoring section (Chapter III) for a projected timeline.

E. WILDLIFE AND LIVESTOCK UTILIZATION

COMMENTS: Questions arose regarding changes from existing grazing plans in managing livestock for big game winter needs and the impact of this on permittees. Some felt that more frequent monitoring was needed for riparian areas and forage as well as monitoring for the differences between wildlife and livestock utilization. It was believed that reduction in cumulative annual use of shrubs from 40% to 20% may be unattainable due to wildlife and other conditions and it was wondered how the percentage was determined and how it would be accomplished. Some stated that the EA/Draft Plan devoted too much

effort to wildlife concerns over cattle concerns.

RESPONSE: This level of planning is not intended to be site specific. Additional projects, data collection and analysis will occur at the project specific level. Livestock utilization studies on BLM lands occur following authorized use but there are no studies currently in place to differentiate livestock use from wildlife use. Other than in the lower two miles of Segment 5, there are no documented high use levels of wildlife or livestock on this river's riparian areas administered by BLM. BLM studies could determine whether use is from livestock or wildlife but these studies would be costly and not resourceful considering the current low use levels. On the Rabbit Valley allotment, wildlife are allocated 331 AUMs and cattle 548. On the North Fork allotment, wildlife are allocated 244 AUMs and cattle 811. Special attention is devoted to wildlife due to the river's distinctive Wild and Scenic status and the requirements of protecting significant and outstandingly remarkable values. Please refer to Monitoring chart (NFCR-23, 24).

F. MONITORING AND ENFORCEMENT

COMMENTS: There was concern as to how grazing permits and violations would be monitored and enforced. Some requested more frequent monitoring of riparian protection and enhancement efforts to analyze trends. Concern was expressed over meeting riparian objectives in Segment 4 since the private landowner can't afford to fence Section 16.

RESPONSE: Monitoring plans for the North Fork were described in Table 5-1 on pages 81 and 82 of the EA/Draft Plan (see new Monitoring chart, NFCR-23, 24). Livestock use supervision visits are scheduled for the North Fork area and other BLM field-going staff are constantly on the look-out for grazing violations. If problems are found, appropriate actions will be initiated. All permit violations will be enforced. In addition, a remote sensing study of riparian vegetation will be conducted this spring. The Wild and Scenic River program is only one of many programs needing more monitoring. No additional monitoring over that described in this Plan is anticipated unless additional dollars are appropriated by Congress. BLM land is fenced from private land in Segment 4.

G. QUESTION PLAN'S ACCURACY

COMMENTS: The determination of poor riparian condition in Segment 1, 2 and 6 was questioned in the EA/Draft Plan. The EA/Draft Plan's use of the terms "natural" and "potential" on pages 32, 40, 51, and 52 were challenged. The notion of riparian recovery within 3-5 year was suspect.

RESPONSE: BLM's riparian condition summary was inadvertently omitted from the EA/Draft Plan appendix. Data has been included in Appendix F of this document. Riparian habitat in Segment 5 is in good condition. Stream surveys conducted in 1991 on public parcels in Segment 6 revealed that the riparian vegetation was in early seral condition with little vegetative cover, no mature stands, and a wide, shallow stream channel. The term "potential" is defined in the glossary of the EA/Draft Plan under "ecological potential". Within Segment 5 there are areas that are examples where riparian habitat is expressing ecological potential. The ecological potential that will be achieved from implementing the Final Plan would maintain or enhance the ORV of riparian vegetation. "Natural" is defined as the conditions that existed prior to any human occurrence and will be determined through long term monitoring. Riparian recovery is expected to be initiated, but not accomplished, within 3-5 years.

WATER RIGHTS, QUALITY AND QUANTITY CONCERNS

COMMENTS: It was felt that the EA's discussion of Segment 5 indicated that less management would restore water quality. Some proposed that the quickest and best way to improve water quality and meet state standards is to eliminate all resource extractive activities from the corridor. Some felt that more

specific information was needed on temperature sampling and the target of 58 degrees. Others were confused about the seemingly conflicting information on page 20 and 12 of the EA dealing with wide, shallow channeling vs deep channeling contributing to poor fish habitat.

Some said that the standards of natural large woody debris occurrence is unreal considering the upriver supply removed. Others thought that the agencies should be more proactive to obtain instream flow objectives through such means as easements, acquisitions, or litigating for reserved rights to maintain stream morphology. Still others felt that granting water rights to agencies could establish a harmful precedence not in the public's best interest. It was observed that agencies need to work with the Department of Environmental Quality and the Environmental Protection Agency to enforce water standards. Some believed that minimum instream flow data needed to be determined immediately. Commentors wanted to see water conservation measures implemented on private land.

RESPONSE: To clarify the Segment 5 discussion on page 15 of the EA, "lack of management activities" is due to difficult access by humans and animals. Actions that will be taken to improve water quality include such projects as vegetative planting, installing large woody debris or rock check dams, and dispersing livestock away from riparian areas. BLM has water sample stations at the beginning of Segment 4 and at the end of Segment 5. Water temperature is measured once an hour, 24 hours a day, 365 days per year. This data is collected and analyzed once a year. The target of 58 degrees or lower is generally accepted as a necessary temperature year-round for cold water fish survival (see EA page 12 and 17). In terms of conflicting information on Pages 12 and 20, high temperatures, wide and shallow river channels, lack of deep pools and overhead cover along with erosive and unstable stream banks all contribute to poor fish habitat in Segments 1, 2 and the lower portion of 5. In Williams Prairie of Segment 1, the process of channelization occurred when the river downcut into the soil due to poor riparian condition. Following that event, the river itself became shallow and wide within the deeper channel (see page 15 of EA).

On USFS segments, the standards have been changed in the Final Plan by not requiring 2 pieces of large woody debris and now provides flexibility in types and amount of instream structures based on specific characteristics of riparian areas and stream morphology (see NFCR-15). On Segments 4 and 5, there is an ample source of naturally occurring large woody debris. The Plan's goals are designed to meet water quality goals. BLM will report the results of its water quality monitoring program to the DEQ. The EPA has established water quality standards but enforcement is a state responsibility. Riparian vegetation on BLM land is in good condition but water quality is poor by the time it reaches BLM land. Even if all of BLM land was in late seral condition, it would not greatly affect the poor water quality.

The EA was in error when it said that minimum instream flows had not been determined. ODFW determined and reported minimum and optimum instream flow recommendations for rainbow trout populations in the late 1960's and early 1970's for 3 reaches of the North Fork. Minimum instream flows for other river values have not yet been determined. ODFW also filed on instream water rights, based on minimum flow recommendations, in May 1990 (and not 1991 as stated in the EA) for all reaches of the river. BLM and USFS do not grant water rights. Persons concerned about who is granted water rights need to contact the Oregon Department of Water Resources. BLM and USFS can work with willing landowners for easements or land acquisitions. If a water right was involved, it could be converted to instream flow. Otherwise, ODFW would be the agency to pursue water rights on private lands. BLM and the USFS will continue to work cooperatively to determine the minimum instream flows necessary to protect and enhance ORVs.

TRIBAL RIGHTS AND CONCERNS

COMMENTS: A complete cultural survey for the entire river corridor was requested. Agencies were reminded about the court ruling on "co-management" with ODFW and it was requested that Warm Springs Confederated Tribes be included with ODFW on pages 12, 24 (B)(4), 32, and 45. It was asserted that the Treaty should be fully quoted in the Plan.

The Trust Responsibility of Federal agencies was mentioned. It was requested that the full title "Confederated Tribes of the Warm Springs Reservation of Oregon" be use on page 11 of the EA. The definition and use of the word "traditional" was questioned. It was wondered how cultural plants, if present, would be impacted by fire management.

RESPONSE: Many issues raised by the Tribes are national issues and are beyond the scope of this document.

The complete survey of the entire corridor, although desirable, is prohibitive with current funding levels. However, completion of some form of sample survey for archaeological and traditional use properties within the next ten years to provide better base-line data will occur. Alternatively, working together through the proposed M.O.U. between the BLM and the Confederated Tribes of the Warm Springs Reservation of Oregon, we may be able to develop a similar strategy to accomplish the same thing. This seems the most realistic approach to these concerns given the very limited impacts expected to occur. Wording in the plan is changed to "Conduct cultural resource survey, evaluation and provide management recommendations as appropriate" (NFCR-19, 21).

The recognition of the 1855 treaty has already been made on page 21 of the EA in the last paragraph of the Cultural/Historic section. It was felt that quoting the relevant sections of the Treaty of 1855 was all that was necessary for this particular document.

There is only one trust responsibility, i.e. the responsibility of the United States. All Federal agencies share in this responsibility in the sense that they are a part of the Federal government. Each Federal Agency is responsible for ensuring that its activities do not in any way diminish the trust responsibility of the Federal government. The full title "Confederated Tribes of the Warm Springs Reservation of Oregon" has been added to all places where cooperation and coordination are mentioned. BLM Manual defines "traditional" as "conforming to tradition" and "tradition" is defined as "longstanding, socially conveyed, customary patterns of thought, cultural expression, and behavior, such as religious beliefs and practices, social customs, and land or resource uses. Traditions are shared generally within a social and/or cultural group and span generations."

BLM does not routinely inventory for cultural plants, however, it is an important resource that needs more attention. Prescribed fires require a Threatened and Endangered plant clearance, at least a minimal one, but cultural plants have not been addressed in the past. This concern will be dealt with more specifically in a separate fire management plan for the river (NFCR-11). Concerns about the timing of prescribed fires can be adequately addressed through procedures outlined in the proposed Memorandum of Understanding between BLM and the Confederated Tribes of Warm Springs. The impact of fire management to cultural plants would be minimal in any case since most would be dormant if fires are conducted after July. Many of these species are all but gone by June. In addition, many of these species are tuberous with the perennating structures well below the soil surface and short of a catastrophic, extremely hot fire that all but sterilizes the soil, cultural plant species would not be affected. Native species are adapted to and often require periodic fire, if fire is considered a natural part of the ecosystem.

COMMENTS: It was questioned how cultural plants, if present, would be impacted

by timber management. It was requested that a survey and monitoring be included in the pre-project program.

RESPONSE: The USFS will survey and monitor for cultural plants prior to timber harvest within the corridor.

BUDGET CHANGES NEEDED

COMMENTS: Some costs estimated in the Implementation and Monitoring portion of the Draft Plan (pages 78-83) were questioned.

RESPONSE: All costs listed in the Implementation and Monitoring tables are based on current costs for similar projects and are the best estimates at this point in time. Costs may change during actual plan implementation. Monitoring costs have been revisited and any necessary changes have been made (NFCR-20 through 25).

GIVE LANDOWNERS CREDIT FOR RESOURCE IMPROVEMENTS EFFORTS

COMMENTS: Landowners requested credit in the Plan for their resource improvement efforts.

RESPONSE: BLM and USFS would like to recognize the resource improvement efforts by private landowners on the North Fork brought to our attention during the public comment period. Gutierrez Cattle Company provided the labor for fencing that created riparian pasture in Segment 2 and for fencing along the northwest side of the canyon rim in Segment 3. The Company has worked to improve habitat for big game, waterfowl and upland game birds. Some of their projects include the development of a fenced refuge created to regulate grazing, nesting sites and platforms around ranch reservoirs, habitat enhancement and protection for upland game birds, and stocking of both pheasants and chukars. Irrigation, pond development, meadows and alfalfa fields on the Les Schwab Ranch support wildlife as well. While other landowners did not bring their specific resource improvements to our attention, we would like to take this opportunity to acknowledge all private landowners working to enhance the natural resources under their stewardship.

EFFECT OF TIMBER HARVEST ON ORV's

COMMENTS: Concern was expressed that harvesting trees can not enhance recreation, scenic and water qualities. Some felt that harvesting should not be allowed for any reason. Others felt that timber cutting activities adjacent to the corridor must be reduced to protect ORVs in the corridor.

RESPONSE: There may have been a misunderstanding as to what was meant by permitting timber harvest only when used "to maintain/enhance scenery, recreation, or water quality" in the EA/Draft Plan. The intent of this statement was not for commercial harvest purposes but to give agencies the ability to cut trees in specific situations such as creating large woody debris for stream enhancement or falling a hazard tree in a camping area. Tree cutting for purposes such as these will be rare and will be done in a manner consistent with the intent of the Wild and Scenic River Act. The effects of timber cutting activities adjacent to the corridor on the Wild and Scenic River will need to be considered and mitigated as necessary before the harvests could take place.

WILDERNESS MANAGEMENT

COMMENTS: Some favored wilderness designation for the WSA and mentioned that the area must be managed as quasi-wilderness with no additional developments if values are to be protected.

RESPONSE: The North Fork WSA was recommended as non-suitable for Wilderness designation by the Prineville District in the mid-1980's. This recommendation

was approved by the BLM's Oregon State Office, Secretary of the Interior and the President of the U.S. The final status of the WSA will be determined by Congressional legislation. In the meantime, it is being managed for its Wilderness potential as a Wilderness Study Area under Interim Management Policy and Guidelines For Lands Under Wilderness Review (BLM Manual H-8550-1).

PREScribed FIRES DESTRUCTIVE TO ECOSYSTEM

COMMENTS: It was stated that prescribed fires could be more destructive than helpful to the natural ecosystem.

RESPONSE: Prescribed burns would be designed around the present situation and would have to take current fuel loads into account. High fuel loads would be lowered over time until safe burns could be conducted in cool conditions. Specific considerations to avoid destructive burns will be addressed in the future vegetation management plan (NRCR-11).

APPENDIX E

Riparian and Range Condition Summary (Forest Service)



'It was sculpting and painting and humming
seaward with all it touched and fed and
carried and concealed, singing,
This - all of this - is why.'

≈ David J. Duncan ≈

The North Fork Crooked Wild and Scenic river corridor contains portions of 5 different cattle allotments. Plans for grazing allotments without current or updated Allotment Management Plans (AMPs) will be guided by the Annual Operating plans until the AMPs are completed. Guidelines for grazing will be based upon the Forest Plan guidelines and this river plan.

The status of each allotment as of August 1992 is as follows:

SEGMENT #1

Fox Canyon allotment contains 13850 acres. It is grazed by 217 pair of cattle from June 10 to September 30th. The allotment is divided into 3 pastures and is managed with a deferred rotation system where each pasture is grazed at a different time each year. The river portion of the allotment is located within one of the three pastures. Due to the drought conditions, the permittee has run 160 pair rather than his permitted 217 for the last 3 years in order to protect the resources.

The Antler allotment contains 755 acres. It is used by 114 pair of cattle from June 16th to September 30th. The allotment is divided into 7 pastures, 3 of which are partially within the river corridor. The allotment has historically been used by 3 small herds, each using 2 or 3 pastures on a deferred basis. Beginning in 1990, the 3 herds were combined into 1 large herd. For the last 3 years, this herd has used each pasture twice during the season. The first time through, cattle stayed from 4 to 10 days in each pasture and then 8 to 14 days on the second time through. The trend within these pastures appears to be upward. Studies and photo points installed in 1990 will be read in the summer of 1993.

The Gray Prairie allotment contains 11286 acres and is divided into 3 pastures. 325 pair of cattle grazed the allotment from June 16th to September 30th. Approximately 3/4 mile of the river runs through one of the pastures. The allotment has historically used the three pastures in the same rotation every year due to the vegetation types, elevation and the distribution of water. The pasture containing the river is grazed first in the rotation, typically from June 16th to July 20th.

SEGMENTS #2 & #3

The Big Summit allotment contains portions of the river in both segments #2 and #3. The allotment contains 2 large pastures and 3 small riparian pastures totalling 24470 acres. 400 cows and calves graze from June 16th to September 30th. In 1989 a new grazing system was initiated to conform to the new AMP written in 1988. Four riparian pastures were proposed, 2 of these along stretches of the North Fork Crooked River. In 1990, the river in segment #2 was

fenced. It was grazed in 1990 with 200 pairs from June 16th to June 25th. In 1991 and 1992 this segment had no livestock grazing. The new AMP calls for this segment to be grazed every third year by 200 pair of cattle for approximately 2 weeks. The portion of the river in segment #3 within the Big Summit Allotment (approximately 2 miles) was fenced in 1992. Because of its small size, topography and lack of water, this segment will most likely not be grazed in the next several years.

The Roba Allotment Management Plan will be revised within the next year. Field data was collected during the summers of 1991-2. Wild and Scenic river objectives will be included in the new AMP. Riparian condition along the North Fork has been good. The pasture containing the North Fork is rested from grazing every third year.

APPENDIX F

Riparian Summary (BLM)



"Seven generations in the past
we had good water. Seven generations
in the future we should give back
that same water that was given to us."

≈ Louie H. Dick, Jr. ≈

North Fork Crooked Wild and Scenic River
Riparian Description for BLM Lands

Riparian conditions along the North Fork Crooked River from Upper Falls to Teater's Ranch are generally very good. Complete surveys of river attributes are on record as far back as 1972. In the original survey, physical and biological conditions were recorded every 1/4 mile of public lands. In subsequent surveys, additional information was collected on bank stability, riparian community types and habitats, and stream channel evaluation. In addition, a water quality and macroinvertebrate station was also established within the canyon. Within the last four years, riparian trend has been rated by re-walking the 1/4 mile survey stations and recording existing changes. In addition, the water quality and macroinvertebrate sampling also continues. This riparian write-up is a summary of those surveys and covers all of Segment 5 and a portion of Segment 6.

The stream channel survey indicates that channel conditions on the 10.4 miles of BLM administered lands rate good. General conditions noted in 1972 and 1978 surveys were moderate to limited mass wasting, limited cutting or deposition, channel bottom conditions in good condition with limited scouring, and limited enlarging of channel or point bars. These conditions were observed in 1987 also, with a general trend toward further stabilization of exposed banks and gravel bars and a slight narrowing of the channel.

Riparian vegetative community typing completed in 1978 described nine (9) types, with four (4) types occupying 90% of the riparian area. Those four types, and percent of riparian area they occupy, are: grass/forb-33.75%, grass/shrub-32%, dogwood/alder-14%, willow/grass-10%. The remaining community types described are willow, forb, spring, alder/willow, and alder/grass. The four major types are described further below:

1. Grass/forb: Occupies 33.75% of total riparian habitat

This community in general possesses good riparian habitat qualities. The present ground cover composition is 52% grass/sedge, 34% forb, 6% shrub/tree, and 8% bare ground. Shrub canopy distribution would be clumped in appearance, the site potential for improvement is high and succession observed is up. Dominant grasses are bluegrass, various wheatgrass, junegrass. Forbs common are vetch, aster, cocklebur, brooklime, and cinquefoil. Shrubs and trees found are alder, willow, dogwood, mockorange, snowberry, ponderosa pine and cottonwood.

2. Grass/shrub: Occupies 32% of total riparian habitat

This community in general possesses excellent riparian habitat qualities. The present ground cover composition is 27% grass/sedge, 35% forb, 24% shrub/tree, and 12% bare ground. Shrub canopy distribution would be clumped in appearance, the site potential for improvement is medium, and plant succession observed is up. Dominant grasses are

bluegrass and junegrass. Forbs represented were yarrow, horsetail, whitetop clover, dock, aster. Shrubs and trees represented and their relative percent of composition are alder-35%, dogwood-35%, wax currant-4%, snowberry-10%, mockorange-5%, and elderberry, golden currant, wild rose and willow with 2% each.

3. Dogwood/alder: Occupies 14% of total riparian habitat

This community in general possesses excellent riparian habitat qualities. The present ground cover composition is 16% grass/sedge, 6% forb, 60% shrub/tree, and 14% bare ground. Shrub canopy distribution would be clumped in appearance, the site potential for improvement is low due to present condition, and plant succession observed is stable. Dominant grass is bluegrass. Limited forbs observed. Shrubs and trees represented and their relative percent of composition are dogwood-49%, alder-20%, mockorange-15%, snowberry-15%, and raspberry-1%.

4. Willow/grass: Occupies 10% of total riparian habitat

This community in general possesses good riparian habitat qualities. The present ground cover composition is 16% grass/sedge, 32% forb, 23% shrub, and 29% bare ground. Shrub canopy distribution would be clumped in appearance, the site potential for improvement is high due to present condition, and plant succession observed is up. Dominant grasses are various wheatgrasses, junegrass and bluegrass. Common forbs or emergent aquatics are aster, whitetop clover, yarrow, vetch, clematis, horsetail, rush, cattail and mullein. Shrubs and trees represented and their relative composition are willow-90%, dogwood-5%, alder-2%, rose-2% and snowberry-1%.

Cover composition combined for all nine communities within the riparian area shows grass/sedges covering 31% of the acreage, forbs covering 29%, shrubs covering 26%, bare ground covering 13% and litter covering 1%.

The following narrative compares conditions from the 1972 and 1978 surveys with the survey completed in 1987. Additional changes may have occurred since 1987, but this does establish a riparian trend with management that is in place at the present time. The comparison of each of the 1/4 mile survey points completed in 1987 indicated an upward trend at 43% of the points, static trend at 50% and downward trend at 7%. The attributes primarily judged were vegetative biomass and diversity, and deciduous riparian shrub occurrence and canopy coverage, and recovery of bank damage. Review of these survey points indicates a definite increase in vegetative biomass, shrub density, total vegetative canopy cover and some improvement in damaged banks.

In reviewing the survey notes from 1978, most of the existing bank damage was attributed to high flows, and were not man caused. Given that situation, many of the areas showing static trend can be expected to be slow in recovery as they are influenced primarily by upstream management and had lower potential for recovery. The areas showing downward trend were located in the lower two miles of Wild & Scenic River Section 5, immediately upstream from the Teaters Ranch. The areas showing static and upward trends are mixed as you proceed upriver from that area, indicating that overall management is allowing the riparian habitats to improve in condition.

APPENDIX G

Boundary Description



"A mountain and a river are good neighbors."
≈ Edward Abbey ≈

Wild and Scenic River Boundary
North Fork Crooked River - Final

Map No. 1 of 1

T. 16 S., R. 21 E., W.M.:

Section 32:

Beginning at the west 1/16 corner common to sections 5, T. 17 S., R. 21 E., W.M., and section 32, T. 16 S., R. 21 E., W.M., thence easterly to the section corner common to sections 4 and 5, T. 17 S., R. 21 E., W.M., and sections 32 and 33, T. 16 S., R. 21 E., W.M.

Section 33:

Thence northerly along the section line common to sections 32 and 33 to the intersection with the canyon rim of the North Fork Crooked River on the southeast side of the river, thence easterly and northeasterly along said canyon rim to the intersection with the north-south centerline of the southwest quarter section, thence northeasterly to the northeast 1/16 corner, thence northerly to the east 1/16 corner common to sections 28 and 33, thence easterly to the section corner common to sections 27, 28, 33, and 34.

Section 27:

Thence northeasterly to the southwest 1/16 corner, thence northerly to the west 1/16 corner common to sections 22 and 27.

Section 22:

Thence northeasterly to the 1/4 corner common to sections 22 and 23.

Section 23:

Thence easterly to the center west 1/16 corner, thence northeasterly to the north 1/4 corner of sections 23, thence easterly to the section corner common to sections 13, 14, 23 and 24.

Section 13:

Thence continuing easterly on the section line common to sections 13 and 24 to the intersection with a point 20' west of the centerline of an existing, unimproved road, thence northeasterly along a line parallel to and 20' west and north of the centerline of said road to the section line common to sections 13, T. 16 S., R. 21 E., W.M., and section 18, T. 16 S., R. 22 E., W.M.

T. 16 S., R. 22 E., W.M.:

Section 18:

Thence continuing northeasterly along a line parallel to and 20' northwesterly of the centerline of said road to the intersection with the north-south centerline of the section, thence northerly along said centerline to the 1/4 corner common to sections 7 and 18.

Section 7:

Thence northerly to the 1/4 corner common to sections 6 and 7, thence easterly to the section corner common to sections 5, 6, 7 and 8.

Section 5:

Thence easterly to the 1/4 corner common to sections 5 and 8, thence northerly to the north 1/4 corner of section 5 on the section line common to section 5, T., 16 S., R. 22 E., W.M., and section 32, T. 15 S., R. 22 E., W.M.

T. 15 S., R. 22 E., W.M.:

Section 32:

Thence northeasterly to the 1/4 corner common to sections 32 and 33, thence northerly to the section corner common to sections 28, 29, 32 and 33.

Section 28:

Thence continuing northerly to the section corner common to sections 20, 21, 28, and 29, thence easterly to the 1/4 corner common to sections 21 and 28.

Section 21:

Thence northerly to the 1/4 corner common to sections 21 and 16.

Section 16:

Thence northerly in a straight line to a monument marked "PT. 44 which approximates the center 1/4 corner, thence northeasterly to a monument marked "PT. 45", which is on the northwesterly edge of Forest Road 4260-340 near the section line common to sections 9 and 16.

Section 9:

Thence along the northerly edge of said road to a point on the section line common to sections 9 and 10.

Section 10:

Thence continuing along the northerly edge of Forest Road 4260-340 to the intersection with the westerly edge of Forest Road 4260-341; thence along the westerly edge of Forest Road 4260-341 to a point opposite of the westerly edge intersection with Forest Road 4260-342; thence crossing Forest Road 4260-341 to a point on the westerly edge of 4260-342 at the intersection of said roads; thence along the westerly edge of Forest Road 4260-342 to the intersection with the westerly edge of Forest Road 4260-200; thence along the westerly edge of 4260-200 to a point on the section line common to sections 3 and 10.

Section 3:

Thence continuing along the westerly edge of 4260-200 to the intersection with the westerly edge of Forest Road 4260-100; thence along the westerly edge of 4260-100 to a point on the section line common to Section 3, T. 15 S., R. 22 E., and Section 34, T. 14 S., R. 22 E., W.M.

T. 14 S., R. 22 E., W.M.:

Section 34:

Thence continuing along the westerly edge of Forest Road 4260-100 to the intersection with the westerly edge of Forest Road 4260-110; thence along the westerly edge of Forest Road 4260-110 to a point on the section line between sections 27 and 34.

Section 27:

Thence continuing along the westerly edge of Forest Road 4260-110 to a monument marked "PT. 333"; thence northerly in a straight line to a monument marked "PT. 332" which is on the southerly edge of Forest Road 42; thence westerly along the southern edge of Forest Road 42 to a monument marked "PT. 331"; thence northerly in a straight line to a monument marked "PT. 23" which is near the section line common to sections 27 and 22; thence westerly approximating the section line common to sections 27 and 22 and sections 28 and 21 to a monument marked "PT. 24" which is on the westerly edge of Forest Road 4200-357.

Section 21:

Thence along the westerly edge of Forest Road 4200-357 to the intersection with the southerly edge of Forest Road 4200-366; thence southwestwardly in a straight line to a monument marked "PT. 25" which is on the easterly side of Forest Road 4200-351; thence southerly along the east edge of Forest Road 4200-351 passing through portions of sections 21, 28 and 29 to a monument in section 20 marked "PT. 26."

Section 20:

Thence Westerly in a straight line to a point on the section line between sections 19 & 20.

Section 19: (Enter Williams Prairie Quad)

Thence continuing Westerly the same straight line to the SW 1/16 corner of section 19; thence Westerly in a straight line to the S 1/16 corner on the West line of section 19; thence Southerly along the West line of section 19 to the Southwest section corner of section 19.

Section 30:

Thence southerly along the West line of section 30 to the N 1/16 corner; thence easterly in a straight line to a monument marked "PT. 20" which is on the East side of Forest Road 4240-054; thence southerly to the intersection with the northerly edge of Forest Road 4240-050; thence continuing along the northerly edge of Forest Road 4240-050 to a point on the section line common to sections 30 & 29.

Section 29: (Enter Keys Creek Quad)

Thence continuing along the Northerly edge of Forest Road 4240-050 to a monument marked "PT. 21", which is at the intersection with the westerly edge of Forest Road 4240-072; thence easterly in a straight line to a point on the section line common to sections 29 & 28.

Section 28:

Thence prolonging same straight line easterly to a monument marked "PT. 22" which is near the section line common to sections 28 & 27; thence southerly to a monument marked "PT. 30", which approximates the section line common to sections 28 & 27; thence westerly in a straight line to a monument marked "PT. 31" which is at the intersection of Forest Roads 4240-080 and 4240-087; thence southerly in a straight line to a point on the section line common to sections 28 & 33.

Section 33:

Thence prolonging same straight line to a monument marked "PT. 32" which is on the northerly edge of Forest Road 4240-091; thence along the northerly edge of Forest Road 4240-091 to a monument marked "PT. 33", which approximates the section line common to sections 33 & 34; thence southerly in a straight line to a monument marked "PT. 34", which approximates the section corner position common to sections 3, 4, 9 & 10, T. 15 S., R 22 E., W.M.

Section 9:

Thence westerly in a straight line approximating the north line of section 9, to a monument marked "PT. 35" which is on the easterly edge of Forest Road 4240-152; thence southerly along the easterly edge of Forest Road 4240-152 to a monument marked "PT. 36"; thence westerly in a straight line to a monument marked "PT. 37"; thence southerly in a straight line to a monument marked "PT. 38", which approximates a position on the section line common to sections 9 & 16.

Section 16:

Thence westerly in a straight line approximating the north lines of sections 16 and 17 to a monument a marked "PT. 39", which approximates a location on the section line common to sections 8 and 17.

Section 17:

Thence southerly in a straight line to a monument marked "PT. 40" which is located on the northerly edge of Forest Road 4240-000; thence easterly along 4240-000 to a monument marked "PT. 41" which is located in a position which approximates the sections line common to sections 17 and 16; thence southerly to the section corner common to sections 16, 17, 20 and 21.

Section 20:

Thence southwesterly in a straight line to a monument marked "PT.42" which is on the northeasterly side of Forest Road 4240-600, approximately 20 feet easterly of said road centerline. Thence southeasterly and southwesterly along a line parallel to and 20' east of the centerline of said road to the section line common to sections 20 and 29.

Section 29:

Thence continuing southeasterly and southwesterly along a line parallel to and 20' easterly of the centerline of said road to the intersection with the north-south centerline of the southwest quarter section, thence southerly along said centerline to the intersection with a point 20' north of the centerline of an existing, unimproved road, thence southeasterly along a line parallel to and 20' easterly of the centerline of said road to the section line common to sections 29 and 32.

Section 32:

Thence continuing southerly and westerly along a line parallel to and 20' easterly of the centerline of said road to the intersection with the east-west centerline of the section, thence westerly along said centerline to the 1/4 corner common to sections 31 and 32.

Section 31:

Thence continuing westerly along the east-west centerline of the section to the intersection with a point 40' east of the centerline of BLM Road #6578-1-00, thence southerly along a line parallel to and 40' easterly of said road to the section line common to section 6, T. 16 S., R. 22 E., W.M., and section 31, T. 15 S., R. 22 E., W.M.

T. 16 S., R. 22 E., W.M.:

Section 6:

Thence continuing southerly, southwesterly, northerly, and southwesterly along a line parallel to and 40' southerly of the centerline of said road to the intersection with the section line common to sections 1, T. 16 S., R. 21 E., W.M., and section 6, T. 16 S., R. 22 E., W.M.

T. 16 S., R. 21 E., W.M.:

Section 1:

Thence southerly along said section line to the south 1/16 corner on the east line of section 1, thence southwesterly to the 1/4 corner common to sections 1 and 12.

Section 12:

Thence southerly to the 1/4 corner common to sections 12 and 13, thence westerly to the section corner common to sections 11, 12, 13, and 14.

Section 14:

Thence southwesterly to the south section corner common to sections 14 and 15 on the north section line of section 23.

Section 23:

Thence westerly on the north section line of section 23 to the north section corner common to sections 22 and 23.

Section 22:

Thence southerly along the section line common to sections 22 and 23 to the intersection with a point 100' northerly of the mean high water line of the North Fork of the Crooked River, thence westerly and southwesterly along a line parallel to and 100' northerly of said mean high water line to the intersection with the east-west centerline of the southwest quarter, thence west along said centerline to the south 1/16 corner common to sections 21 and 22.

Section 21:

Thence westerly along the east-west centerline of the southeast quarter to the intersection with a point 40' southeasterly of the centerline of Teaters Road, thence southwesterly along a line parallel to and 40' southeasterly of the centerline of said road to the intersection with the north-south centerline of the southeast quarter section, thence southerly along said centerline to the east 1/16 corner common to sections 21 and 28.

Section 28:

Thence southerly to the center east 1/16 corner, thence south-westerly to the west 1/16 corner common to sections 28 and 33.

Section 33:

Thence southerly to the northwest 1/16 corner, thence southwesterly to the 1/4 corner common to sections 32 and 33.

Section 32:

Thence southwesterly to the center south 1/16 corner, thence southwesterly to the west 1/16 corner on the south section line of section 32, point of beginning.

Wild and Scenic River Description
North Fork Crooked River - Segment 1 (USFS)

Williams Prairie Quad

T. 14 S., R. 21 E., W.M.:

Section 32:

Beginning at the SW 1/16 corner of section 32, T. 14 S., R. 21 E., W.M.; thence south along the north-south centerline of the southwest quarter of section 32 to the intersection with the easterly edge of Forest Road 4215; thence southerly along the east edge of Forest Road 4215 to a point on the section line common to Section 32, T. 14 S., R. 21 E., W.M. and section 5, T. 15 S., R. 21 E., W.M.

T. 15 S., R. 21 E., W.M.:

Section 5:

Thence continuing southerly along the east edge of Forest Road 4215 to a point on the section line common to sections 5 and 8.

Section 8:

Thence continuing southerly along the east edge of Forest Road 4215 to the intersection with southwesterly edge of Forest Road 4225; thence southeasterly along the edge of Forest Road 4225 to a monument marked "PT. 1" which is located at the intersection with the westerly side of Forest Road 4225-010; thence southeasterly in a straight line to a point on the section line common to sections 8 and 17.

Section 17:

Thence prolonging straight line to a monument marked "PT. 2" which is on the east side of Forest Road 4225 at the intersection with 4225-090; thence along the easterly edge of Forest Road 4225 to a point on the section line common to sections 17 and 20.

Section 20:

Thence continuing along the easterly edge of Forest Road 4225 to a monument marked "PT. 3" which is located at the intersection of Forest Road 4225 and Forest Road 4225-120; thence easterly in a straight line to a point on the section line common to sections 20 and 21.

Section 21:

Thence prolonging straight line to a monument marked "PT. 4" which is located on the easterly edge of Forest Road 4225-141; thence northeasterly in a straight line to a monument marked "PT. 5" which is on the south edge of Forest Road 4225-143 and is near the section line common to sections 21 and 16.

Section 16:

Thence northerly in a straight line to a monument marked "PT. 6" which is located on the south edge of Forest Road 4225-144; thence westerly along the south edge of Forest Road 4225-144 to the west side of and at the intersection with Forest Road 4225-141; thence northerly along the west edge of Forest Road 4225-141 to a point on the section line common to sections 16 and 9.

Section 9:

Thence continuing northwesterly along the west edge of Forest Road 4225-141 to a point on the section line common to sections 9 and 8.

Section 8:

Thence continuing northwesterly along the west edge of Forest Road 4225-141 to the intersection with the southerly edge of Forest Road 4225-060; thence continuing along the south edge of 4225-060 to the west edge of and at the intersection with Forest Road 4225-050; thence northerly along the west edge of Forest Road 4225-050 to the intersection with the westerly edge of Forest Road 4225-070; thence northerly along the west edge of Forest Road 4225-070 to a monument marked "PT. 7" which is near the section line common to sections 5 and 8; thence westerly, approximating the section line common to sections 5 and 8, to a monument marked "PT. 8".

Section 5:

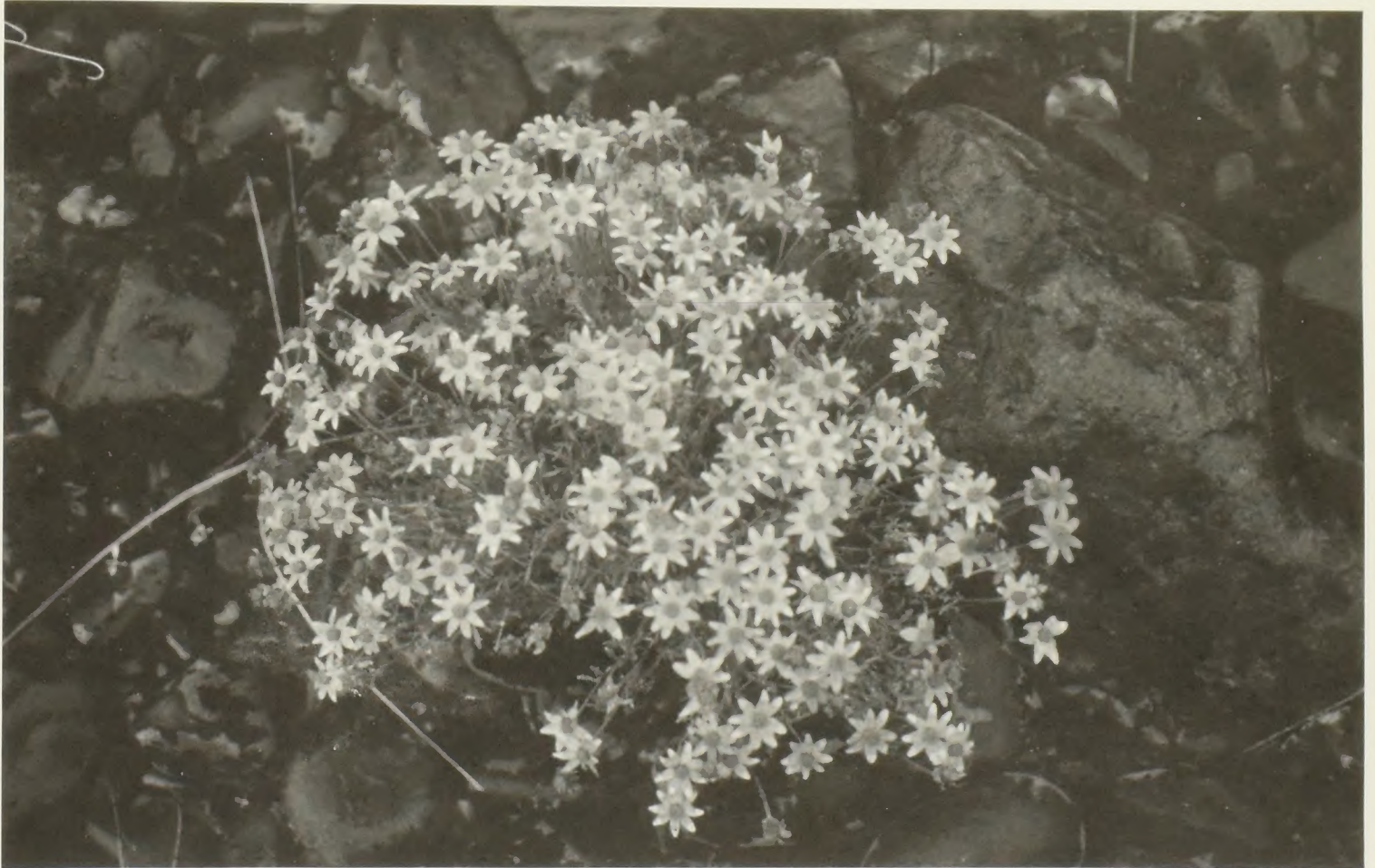
Thence northerly in a straight line to a point on the section line common to Section 5, T. 15 S., R. 21 E., and Section 32, T. 14 S., R. 21 E., W.M.

Section 32:

Thence prolonging said straight line northerly to the southeast 1/16 corner of Section 32, T. 14 S., R. 21 E.; thence westerly in a straight line to the point of beginning.

APPENDIX H

Letter to the Crook County Planning Department



"The Indian thinks in terms of a circle.
If we take care of the water and the land,
it will take care of us."

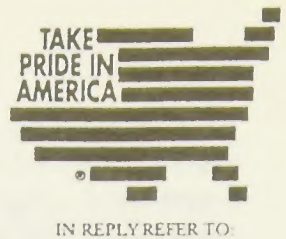
≈ Louie H. Dick, Jr. ≈



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Prineville District Office
P.O. Box 550 (185 E. 4th Street)
Prineville, Oregon 97754



8350

JUL 08 1992

Mr. Bob Harrington
Crook County Planning Department
Crook County Courthouse
Prineville, OR 97754

Dear Bob:

Cooperation between Crook County and the Federal agencies charged with management of Nationally Designated Wild and Scenic Rivers is important to achieve protection of river values. The Bureau of Land Management, Prineville District, and Ochoco National Forest personnel have met with County Planners to coordinate our Wild and Scenic River planning efforts and discuss ways to aid you in updating the County Comprehensive Plan. During our discussions, relating to designated Wild and Scenic River segments in Crook County on the Crooked River and North Fork of the Crooked River, it became apparent that our role pertaining to private land within the Federal Wild and Scenic River boundaries needed clarification.

Regarding the management of private lands within the designated boundary of the Wild and Scenic Rivers, the Federal government has no authority to regulate or zone private lands. Land use controls on private lands are solely a matter of state and local regulation and zoning. In absence of local or state river protection provisions, the Federal government could take steps to protect the river through purchasing easements, completing land exchange, or mitigating with willing landowners. At this time, BLM is pursuing land exchanges with willing landowners on the BLM administered portion of the North Fork Crooked River. There are no plans at this time to pursue any Federal purchases, acquisition of easements, or land exchanges on Forest Service managed segments. For additional insight on The Oregon Omnibus Wild and Scenic Rivers Act of 1988, we are enclosing a Question and Answer sheet developed in 1989.

Our agencies have formulated a joint policy which we hope will assist the County planning process. We will provide the County Planning Department with Resource Assessments for the two rivers, maps, draft and final environmental assessments, and river management plans. In these documents, we describe the desired future condition of public land resources along the river. We also describe alternative strategies to arrive at these desired future conditions. In addition, specific management goals and actions on federal lands are outlined. The County is welcome to use this information as a guide in determining County Plan revisions for private lands with similar

characteristics within these federally designated rivers. We also suggest using the State Scenic Waterway guidelines as a tool. Although some rivers were not included in the State Scenic Waterway program, these guidelines are helpful for zoning.

Should the County wish input on specific projects, the Federal agencies would provide feedback on the project's potential effects to Wild and Scenic Rivers. For example, if a gravel pit were proposed on private lands within a Wild and Scenic River corridor, the administering federal agency would identify the gravel pit's potential effects on special river values such as scenery, fisheries, etc. The county could then use this federal agency information to make their final decision on whether or not to implement the project and in what form.

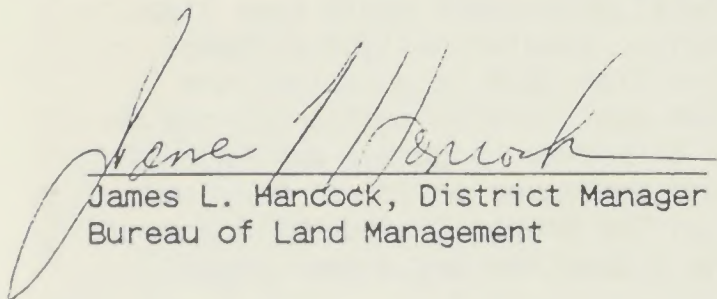
Draft river management plans and environmental assessments should be available by July 1, 1992. Resource Assessments, maps, and preliminary boundaries are available at this time. Our offices and planning staff are available to assist you in locating information at any time.

We hope this information has provided some clarity on how the Bureau of Land Management Prineville District and Ochoco National Forest can aid you in revising county plans. The following agency planners can assist you with further information:

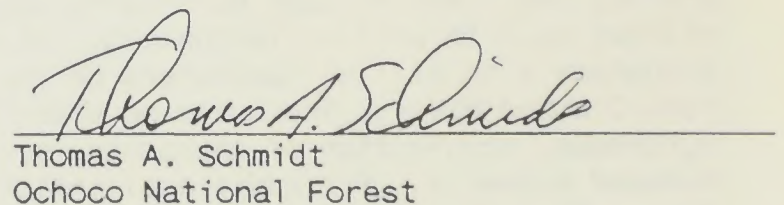
SuZan Meiners, BLM (447-8770 - North Fork Crooked River
Ed Perault, BLM (447-8741) - Crooked River
Sue Kocis, USFS (447-9530) - both rivers

We look forward to working with you in the future. Please feel free to contact us if you have further questions or need additional information.

Sincerely,



James L. Hancock, District Manager
Bureau of Land Management



Thomas A. Schmidt
Ochoco National Forest

Enclosure
as stated above.

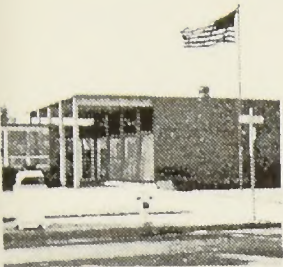
APPENDIX I

Letter from the Crook County Planning Department



"There is an inward voice, that in the stream
Sends forth its spirit to the listening ear,
And in a calm content it floweth on.

≈ Henry David Thoreau ≈



CITY-COUNTY PLANNING DEPARTMENT

Crook County & City of Prineville
Alan Rappleyea, Director
Courthouse
Prineville, Oregon 97754
(503) 447-3211

March 4, 1993

Jim Hancock
Prineville District Manager
Bureau of Land Management
PO Box 550
Prineville, OR 97754

RE: Riparian Protection

Dear Jim:

Uses on private lands within Wild and Scenic River segments in Crook County are regulated by the Crook County-Prineville Area Comprehensive Plan and the Crook County Zoning Ordinance, as well as applicable state and federal laws.

Crook County has submitted its periodic review for Goal 5 Resources to the state Department of Land Conservation and Development (DLCD) and formal action is pending. River values on private lands within the wild and scenic river corridor will be protected through riparian and rimrock setbacks and minimum lot size ordinances.

The "Riparian Protection Zone" is defined as 100 feet from lakes and from Class I and II streams. Setbacks are measured horizontal and perpendicular from the ordinary high water line. Any development shall be located outside this riparian protection zone unless it meets one of four exemptions. All trees and at least 75 percent of the understory vegetation shall be retained within the riparian protection zone with a few exceptions.

The "Rimrock Setback Requirements" (Zoning Ordinance Section 4.200) state "A proposed structure locating on the rimrock shall be set back 200 feet from the edge of the rimrock". This ordinance is sufficient to protect scenic values on private lands in Segments 2-5. Rimrock is not as evident in Segments 1 and 6.

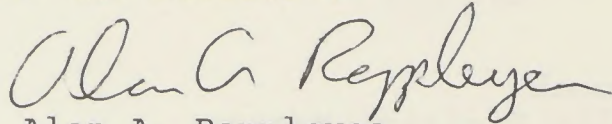
The North Fork is inventoried as a significant Goal 5 resource in the County Plan. The County will notify the Ochoco National Forest of any change in land use within the proposed administrative boundary of the North Fork, above Lane Dog Creek. The County will notify the BLM of any change in land use below Lane Dog Creek. Within six (6) months after completion of this management plan for the river, the County will: (1) Evaluate the outstandingly remarkable values; (2) Identify conflicting uses; and (3) Based

DM	PROJ. MGR/PA	RES. SERV.	RANGER
ADMIN	CENTRAL OREGON	DESCHUTES	READING
FILE			

*Original
Brian had it
all*

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Page 2

on an ESEE analysis, develop a program to achieve Goal 5. Until this work is completed, the County will rely on the riparian protection ordinance to protect the resource.



Alan A. Rappleyea
Planning Director

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
PRINEVILLE DISTRICT OFFICE

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